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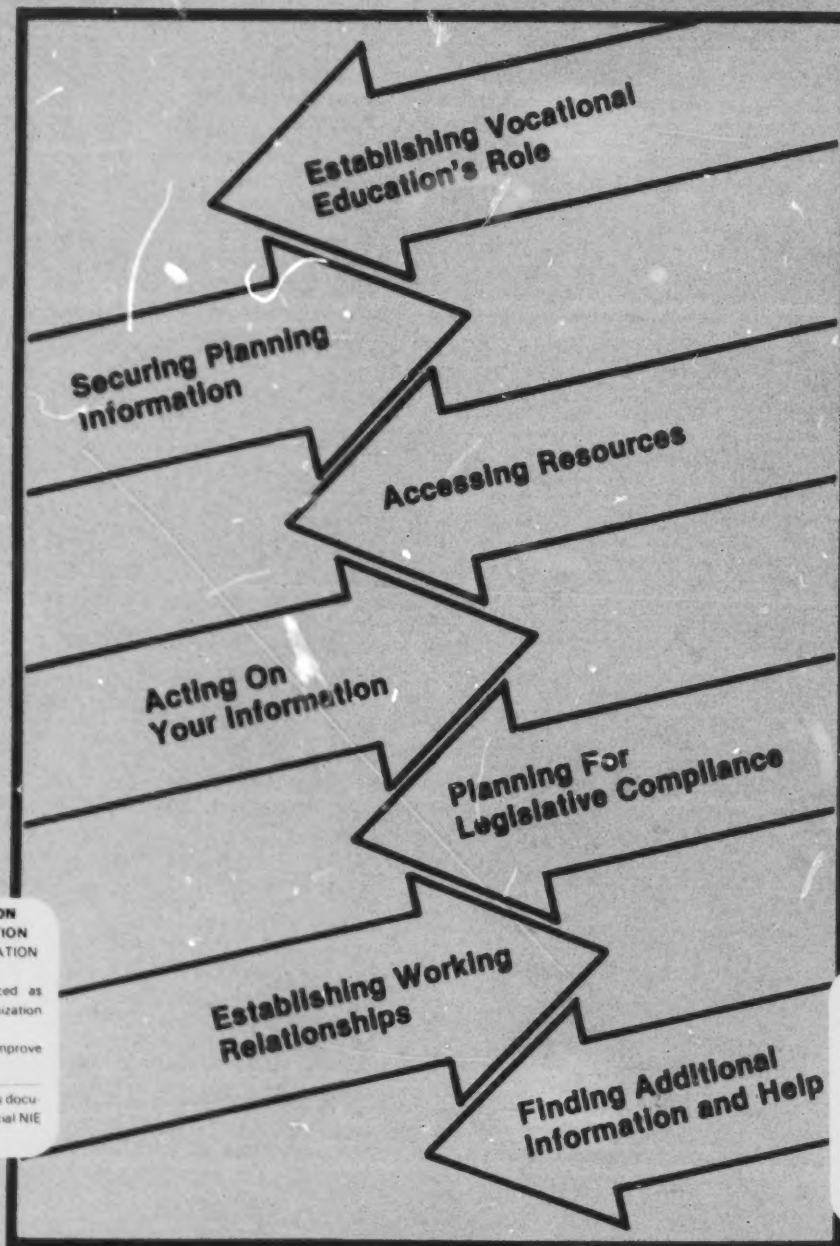
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ABSTRACT

This guide provides local vocational administrators (LVAs) with information and guidelines to plan vocational programs for their school, district, or community college. The first four chapters outline a four-step planning process. They guide the LVA through (1) establishment of vocational education's place within the community's educational system; (2) identification and utilization of available occupational supply and demand data as well as collection of data needed to supplement existing information; (3) acquisition of the broadest variety of program support resources from federal, state, local, and private sources; and (4) action on the information through a four-step process (consolidation of data, analysis of information, prioritization of needed action, and development of a program of work). Chapter 5 alerts LVAs to legislative compliance items that should be infused in plans. Chapter 6 identifies external and internal groups and agencies with which the LVA must interact. Examples and recommendations are provided for such groups as sending schools, parent/teacher organizations, and business, industry and labor groups. The final chapter lists resources and agencies to contact for additional information, citing name and address, key contact person, and telephone number. The document list is a bibliography of all documents cited in the guide. (YLB)

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VOCATIONAL PLANNING GUIDE

Missouri

Division of Career & Adult Education

Department of Elementary & Secondary Education

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Why This Guide?

The challenge was to develop a practical guide to help local vocational administrators (LVA) plan effective and efficient vocational programs for their school, district, or community college. This task was addressed by carefully analyzing the planning procedures of other state approaches as well as by securing valuable input from two advisory groups, as listed on the inside cover. The services of all members are appreciatively acknowledged.

The guide is comprehensive in nature and it contains information and guidelines necessary to meet the mandate of vocational education law as well as those mandates of good professional practice that are the hallmark of Missouri's vocational education system. To maintain practicality, existing information sources were incorporated as much as possible and new sources were added only when they provided information that was otherwise unavailable or inconvenient.

Where Does Planning Fit In?

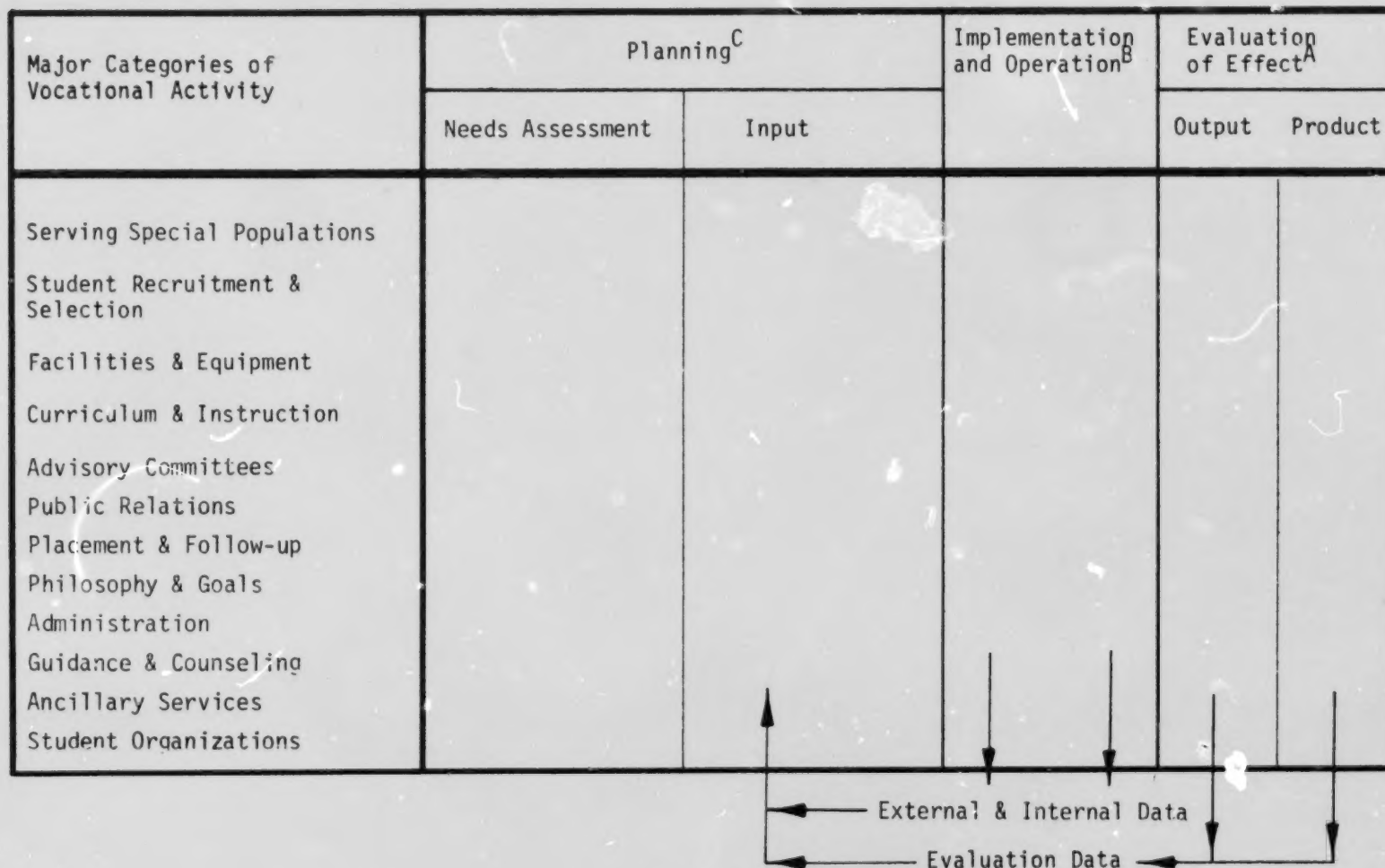
Planning is essentially a "front-end" activity that precedes action to put something into effect. Realistically, planning also occurs while programs or activities are being conducted, but in these cases planning usually works to generate a "new/improved" version that is to be implemented when the current program or activity reaches a logical end. In vocational endeavors this usually occurs on an annual basis and thus it coincides with the funding cycle.

Planning, as outlined in this guide, carefully incorporates evaluative information from output measures of vocational activity as well as from its operation. Figure 1 shows a comprehensive approach wherein a vocational administrator would plan for each category or activity (listed vertically on the left) and then conduct it through the subsequent stages of implementation/operation and evaluation.

This guide will outline a planning process that involves the steps of:

- Step 1. Establishing vocational education's roles
- Step 2. Securing needed information
- Step 3. Identifying and accessing resources
- Step 4. Acting on the available information by developing a specific plan of action

Figure 1
Overview of Vocational Activities and Stages



A. Procedures for Evaluation are suggested in the Program Evaluation Project Handbook available from DESE's C&AE RCU.

B. The procedures for implementation and operation of vocational programs may be found in local Policy and Procedural Handbook. Some statewide guidelines are found in the State Plan for Vocational Education.

C. The recommended Planning Procedures may be found in this Guide.

Using This Guide

This guide is intended to be useful to the LVA; in no way is it to be viewed as prescriptive. As a guide, it contains suggestions gleaned from experience, recommendations, and the literature. However, this guide does not present "the only way to plan." Instead, it seeks to highlight some selected ways. LVAs are therefore encouraged to adapt the recommendations to meet the specific demands of their local situation.

The guide is intended to alert LVAs to many of the considerations and factors that need to be taken into account when planning quality vocational programs. Furthermore, as the resource pool available to education shrinks, the availability of carefully documented plans will play an increasingly important role in the resource allocation decisions of local, state, and federal agencies.

Overview of This Guide

There are eight main chapters in this guide. Each is self-contained as much as possible. They are listed below, together with a brief description of their content, in the order that they follow in this guide.

I. Establishing Vocational Education's Role

- This section guides the LVA to the establishment of vocational education's place with the LEA's overall educational thrust.
- Also, this section alerts the LVA to review the purposes of each vocational education program to insure that all overall goals are effectively addressed.

II. Securing Planning Information

- This section guides the LVA through the identification and utilization of available occupational supply and demand data
- Also outlined are suggestions for the collection of data needed to supplement preexisting information.

III. Accessing Resources

- This section provides an overview of what funding (and other resources) sources exist and to what ends such support may apply. Federal, state, local and private sector sources are surveyed.
- This section also provides the LVA with some guides to review current and projected resource utilization.

IV. Acting on Your Information

- Of major importance, this section provides LVAs with a four-step process to synthesizing the available information in a systematic manner.
- Each of the four steps is detailed with sample forms and procedures useful to the LVA.
- The four steps to acting on your information are:

- Step 1: Consolidating Data
- Step 2: Analyzing Information
- Step 3: Prioritizing Needed Actions
- Step 4: Developing a Program of Work

V. Planning for Legislative Compliance

- Although compliance items are infused throughout the first four chapters, this section will help LVAs review their plans for specific attention to legislative mandates such as equity, service to special populations, representative planning input, and the like.

VI. Establishing Working Relationships

- This section will help LVAs review their links and involvements with external and internal groups and agencies that are relevant to vocational education.
- Examples and recommendations are provided for such groups as sending schools, PTO, business-industry and labor groups and many others.

VII. Finding Additional Help

- This section lists resources and agencies that the LVA may contact/review for additional information.
- A bibliography describes each source/document referred to in the guide.
- Additionally, this section lists key agencies, associations, and individuals that can provide planning assistance to LVAs.

Special Points

- This guide is not intended to be read cover to cover (although an initial scan and familiarization with its contents is desirable).
- Frequently, LVAs can go directly to the section that represents their most current need.
- Furthermore, because this guide necessarily contains only a brief capsulization of good practices encountered by the research team, LVAs seeking detailed and in-depth information are encouraged to:
 - consult the references provided in Chapter VII, Finding Additional Help.
 - contact appropriate resource people as identified throughout this guide.
 - contact members of this project's research team, at the University of Missouri-Columbia.

Definitions

BIL	Business/Industry/Labor
C & AE	Division of Career & Adult Education
Courses	These are the components that make up programs.
DESE	Department of Elementary and Secondary Education
LEA	Local Educational Agency
LVA	Local Vocational Administrator
MOIS	Missouri Occupational Information System
Mission or Goal/ Thrust	A broad purpose for education
Objective	A more specific interpretation of a mission statement
Programs	Specializations that exist within a service area. Usually different programs prepare persons for differing job families within the occupational cluster addressed by a specific service area.
Service Area	The traditional, legislatively derived categories for vocational education's offerings. The areas are: Agricultural Education Business and Office Education Health Occupations Home Economics Education Industrial Arts Education Marketing and Distributive Education Technical Education Trade and Industrial Education

Establishing Vocational Education's Role

An important first step in all planning is to establish the program's overall role or mission. For the LVA, this typically involves two key steps:

- Clarification of vocational education's role among the other purposes assigned to the community's education system; and
- Identification of how each vocational program, activity, or service contributes to the overall goals assigned to vocational education.

What Is Vocational Education's Role Within the Overall Education Program?

The answer to this question may already exist in the school's "missions and goals" statement or in a "school philosophy" section as prepared for a self-study or North Central Association site visit. However, LVAs often need to reaffirm such prior work to insure that it reflects the rapidly changing time. Several points related to vocational goal statements need to be outlined:

- Statements need to be reviewed/updated approximately every five years.
- Reviews should involve professional vocational educators as well as:
 - members of the community served.
 - students.
 - representatives of significant (in terms of presence) minority, nontraditional and special populations.
 - spokespersons for the disadvantaged and handicapped.
 - business, industry and labor.
- The final document needs to comprehensively list the educational system's overall goals along with some indication of the importance of each.

How Can Such Statements Be Developed?

Educational mission statements need to be developed with significant provision for community involvement if the citizens are expected to endorse the final product. All sectors and special interest groups within the community/district, or those of the sending schools, should have an opportunity to participate in this process. Methods of obtaining public views include:

- Surveying parents and/or community members (as described later in this guide's section on securing information).
- Public meetings, held throughout the district(s), to obtain community input.

Figure 2

Mission and Goal Analysis Worksheet

Community Meeting Number _____ Group Number _____ Group Leader _____

<u>Present Missions and Goals</u>	<u>Rank</u>	<u>Rank</u>	<u>*Cardinal Principles of Education</u>
List here your institution's present missions and goals.			<u>To develop:</u>
			Personal competence and development (reading, math, English)
1.			Health (instruction)
2.			Family cohesiveness
3.			Skilled decision-making
4.			Moral responsibility and ethical action
5.			Vocation capability
6.			Civic interest and participation
7.			Respect for the environment
8.			Worthy use of leisure
9.			Global human concern

Discrepancy Review:

*Modified from Richard E. Gross "Seven New Cardinal Principles, Kappan, Dec. 1978, p. 291-293.

Regardless of the method employed, it is often helpful to establish a planning committee (with public, administrator, board member, faculty, and student members) to actually conduct such activities. Public notices of meetings should be widely distributed and to insure participation of those in attendance, a group activity should be planned.

Activities which encourage expression of values, which limit peer pressure, and which focus the group are most desirable. One such activity has community members first rank the overall goals expressed by the Cardinal Principles of Education* and subsequently compare these to the objectives presently in existence for the institution. This activity, based on the worksheet provided in Figure 2, involves the steps:

1. Each participant assigns an overall importance rank to each cardinal principle.
2. Then, each participant assigns an overall importance rank to each institutional mission/goal statement.
3. Participants then compare their rankings for the two lists of goals and attempt to answer the questions:
 - a. Why are my two ranks different?
 - b. What should the overall combined ranking be?
 - c. Are there any institutional mission or goal statements that do not fit under a Cardinal Principle?
 - d. Are there any Cardinal Principles that are not reflected in an institutional mission?
4. Subsequently, group discussion could focus on each of these questions, during which time each set of priorities could be tabulated to establish the audience's ratings. Finally, these averages could be reported and discussed.
5. Alternatively, should the school not have a statement of goals or mission, then the above procedures could easily be revised to have small groups of participants develop draft statements of goals/missions in accordance with the Cardinal Principles or the Missouri Education Goals. Then the planning committee could compile the input and evolve a suitable statement.

How Do the Components of Vocational Education Contribute to the Overall Goals for Vocational Education?

Just as the LVA seeks to establish the role of vocational education in the overall mission of education at his/her institution, so must he/she establish the contribution of each of vocational education's components to the overall vocational mission. This means that the LVA needs to:

1. Identify the goals(s) for each vocational program, activity, and service.

* The Educational Goals for the State of Missouri could be substituted for the Cardinal Principles shown in Figure 2.

Figure 3
Goals for Vocational Education

DEPARTMENT OF ELEMENTARY AND SECONDARY EDUCATION
DIVISION OF CAREER AND ADULT EDUCATION

1. Maintain and expand vocational programs and services for increasing numbers of secondary students commensurate with labor market demands.
2. Maintain and expand vocational programs and services for persons who need postsecondary education commensurate with labor market demands.
3. Maintain and expand vocational programs and services for persons who need adult education commensurate with labor market demands.
4. Maintain and expand vocational programs and services for disadvantaged and handicapped persons.
5. Provide a program of pre-service and in-service vocational education for professional personnel development.
6. Provide state and local leadership opportunities for the further development and continued growth of the Missouri program of vocational education.
7. Provide administrative, ancillary, and other supportive services to enhance the quality of vocational instruction program efforts.
8. Improve the quality of vocational programs through exemplary, research and development programs and related research activities.
9. Provide programs, services and activities which assure equal access by females and males in all Missouri vocational education programs.

2. Ascertain the consistency of these goals with current national governmental and professional thrusts, e.g.
 - contribution to economic development
 - equity for special populations
 - contribution to energy preparedness
3. Compare these listed goals to the nine state goals for vocational education (Figure 3).
4. Reconcile any obvious disparities; then one or more of the following options need to be considered:
 - a. assignment of unaddressed state goals to one or more of the institution's vocational programs, activities, and services.
 - b. deletion of local goals that do not reflect a Missouri vocational education goal.
 - c. development of a local rationale to justify why the disparity is appropriate in this situation.

Securing Planning Information

Overview

Vocational planning seeks to involve the matching of population or client needs and interests with community manpower needs. This process involves organizing existing internal data and collecting external data to meet this objective. This section of the planning guide provides information on existing data sources, and suggestions on the type and method of collecting external data.

Using Existing Information

Much of the data necessary for planning has already been compiled through an existing system or agency. Because effective planning depends on a comprehensive and high-quality data base, the LVA needs to be familiar with information needed and the sources through which it is available.

Data sources may be classified according to the geographic area involved, e.g., local, state, and national. Depending on the location of the school, level of instruction, and the specific occupational training program involved, LVAs will find different data sources helpful in program planning.

Table I provides information on some of the occupational and employment data sources available in Missouri. These sources are grouped according to the geographic region which they cover.

Local

At the local level there are a variety of information sources available. The LVA, however, must document and organize data from these sources for planning purposes.

The Local Job Service Office can assist the LVA beyond providing employment information. While not all Local Job Service Offices have a labor market analyst, they can put you in contact with one who is familiar with the local data and can assist in program planning.

Other existing sources of local information include program/institutional advisory committee reports and local/regional newspapers.

State

Missouri Occupational Information System. The recently developed Missouri Occupational Information System (MOIS) should serve as the central resource for the occupational needs search. The Occupational Data Book is particularly useful. This report is published by the Missouri Occupational Information Coordinating Committee (MOICC).

Table 1
Employment Data Sources

Resource	Geographic Coverage	Availability	Data Item
<u>Job Openings Information Program</u>	Nation, state, Job Bank Districts	Local Job Service Office, contact local labor market analyst	Job openings by state & local area; occupation category; industry; average pay; education & skill requirements
<u>Count: Business Patterns (CBP)</u>	Nation, states, counties	Public libraries & for sale by the Superintendent of Documents, U. S. Government Printing Office	Nonagricultural wage & salary employment, number of employees, total payroll, number of establishments by type of business & employment size
<u>Economic Census</u>	Nation, states, SMSAs, counties	Public libraries & for sale by the Superintendent of Documents, USGPO	Employment by industry; location; payroll; hours worked
<u>Missouri Population Estimates & Projections</u>	State by county	Missouri State Library	Population estimates by county for 1977-1990
<u>Missouri Demographic Economic Analysis</u>	State by county	Missouri State Library	Demographic variables include: population growth, density, & projections; urban & rural distribution; age & sex composition; color characteristics & various other characteristics. Economic variables include: number of employees, projected changes in employment, payrolls, industry, civilian labor force & various measures of real wealth
<u>Manpower Information for Affirmative Action</u>	State & SMSAs; county labor areas	Local Job Service Offices; contact local labor market analyst	Employment by occupational group indicating sex & minority status of workers; last occupation of experienced unemployed by sex & minority status; occupational characteristics of job applicants at local Job Service Offices
<u>Annual Planning Report (APR)</u>	State & SMSAs	Contact local labor market analyst	Characteristics of disadvantaged residents in need of manpower services; employment outlook by industry & occupation
<u>Occupational Outlook Handbook</u>	National	Public libraries & for sale by the Superintendent of Documents, USGPO	Occupational descriptions (i.e., earnings, job duties, educational requirements)
<u>Census of Population</u>	Nation, state, & substate areas	Public libraries & for sale by the Superintendent of Documents, USGPO. Information for substate areas available from Public Affairs Information Service, 10 Professional Building, UMC, Columbia, Missouri 65211	Population characteristics (i.e., race, sex, age, residence, etc.)

From Stevens, D. W. and Taylor, S. Occupational Employment Data Sources. Columbia, MO: University of Missouri-Columbia, 1980.

The Occupational Data Book provides the most comprehensive compilation of supply-and-demand data on approximately 375 Missouri occupations. In addition to whole-state coverage, data for these occupations are also available for the Standard Metropolitan Statistical Areas (SMSAs) of: St. Louis, Kansas City, St. Joseph, Springfield, and Columbia. LVAs are strongly encouraged to obtain a copy of this report and familiarize themselves with its use. Its synthesis is most valuable, particularly since it compiles information from the following sources:

- HEGIS (Higher Education General Information Survey)
- VEDS (Vocational Education Data System)
- NCES (National Center for Education Statistics) Postsecondary Career School Survey
- CETA (Comprehensive Employment and Training Act) Manpower Training-CETA Contracts
- Job Corps
- ESARS (Employment Security Automated Reporting System) Table 96

Missouri Division of Employment Security. If your Local Job Service Office does not have a market research analyst, you may be referred to this agency at the state level. In addition to publishing several useful employment-related documents (see Table I), this agency has several analysts available to assist in interpretation of the data.

State Plans. Depending on the type of institution, the LVA should obtain and become familiar with the following state plans in the local planning process.

<u>Type of State Plan</u>	<u>Source & Contact</u>
• State Plan for Career Education	DESE, Career & Adult
• State Plan for the Education of the Handicapped	DESE, Special Education
• State Plan for Vocational Education	DESE, Career & Adult
• Master Plan III for Postsecondary Education (if applicable)	Department of Higher Education

In addition to these references, the DESE Division of Administration's Management Information Service offers several other elementary and secondary school statistical publications which may be of use to the LVA.

National

In certain situations the LVA may need national data for planning. In addition to those listed in Table I, other data sources and/or agencies with information available at this level include:

- National Occupational Information Coordinating Council (NOICC)
- Annual Report on Vocational Education
- Employment and Training Report to the President
- Professional/Trade Associations
- American Vocational Association
- American Association of Community and Junior Colleges
- National Center for Education Statistics

These last three organizations publish a variety of documents which may be useful to the LVA, depending on the local situation. Addresses for these organizations are listed in the resource page of this section.

Collecting Data

One phase of the planning process involves collection of external data. When planning for the type and number of vocational programs to be offered, several groups of people should be assessed. These groups are students, parents, members of the community, special populations, teachers within the institution, program graduates, and business and industry. The first six groups provide the LVA with information on the students' vocational needs and interests, parental preferences, adult training needs and interests, and trends and changes in vocational education service areas respectively. The latter group provides the LVA with a prediction of occupational demand as well as specific program information that is most useful in curriculum and facility development.

Relationship of Needs Assessment to Planning

A comprehensive needs assessment is not an easy task. The process requires a strong commitment by the Local Vocational Administrator in terms of time and attention to detail. However, needs assessment is a way to:

- access localized information
- validate national, state, and regional trends
- develop rapport with constituencies
- establish contact with the community
- test one's judgement
- document/justify decisions

Types of Needs Assessments

There are as many sources of data for the needs assessment process as there are needs. Specific sources depend on which of the seven groups are being addressed, and the type of information the LVA feels is necessary. Essentially there are three major reasons for conducting vocational needs assessments.

Figure 4

Needs Assessment Availability Report

TOPICS ASSESSED

	← Perceived Vocational Interest →			← Performance Discrepancy →	
	← Local Market Demand →				
Constituencies or Population Assessed	Overall desire for Voc. Ed.	Desire for specific service area; e.g., B&O, T&I, etc. (Name)	Desire for specific course; e.g., auto body, cosmetology, (Name)	Perceptions of Need based upon direct experience with the program	Other
Local parents					
Local community members					
Local BIL					
Local students					
Local faculty					
Program Graduates					
Special populations (specify)					
Sending School parents					
Sending school community members					
Sending district BIL					
Sending school students					
Sending school faculty					
Special populations (specify)					

1. Use this chart to indicate needs assessments that you currently have access to.
2. Cross out any needs assessments that are over six years old.
3. Compare to lists of existing programs (in your institution) and list which programs do not have a currently valid needs assessment of Employer Demand and Student Interest.

- Identification of labor market demand for vocationally trained persons
- Identification of the perceived vocational needs and interests of the clients served (or potentially served by vocational education)
- Identification of performance discrepancies

This chapter will provide detailed information on the first two approaches. Details for the third, however, will not be described here. Performance discrepancies can be identified through an evaluation process (Contact, Division of C&AE, DESE for Vocational Program Evaluation Procedures).

Needs Assessment Process

It is suggested, that as a first step in the needs assessment process the LVA take stock of what is actually available in terms of actual assessments of key constituencies. Figure 4 provides a convenient way to record the availability of needs assessment data. On this chart, the LVA first enters the title of the document (and perhaps even the specific question numbers) that provide indication of a specific constituency's feelings on a topic as listed across the top of the chart. Note that if a given instrument was sent to several different constituencies (as listed in the vertical population columns), and if the data were analyzed separately for each constituency, then each should be considered as a separate needs assessment. Otherwise, the LVA should first bracket the populations surveyed to indicate the availability of only pooled needs data.

Subsequently, the LVA needs to cross out any needs assessments that are over five years old (an operational decision--with a deliberate rationale any other justifiable time period may be used). Then by comparing the available and current needs assessments to the lists of vocational programs offered, and/or considered for future implementation, the LVA can identify voids that need to be addressed by conducting additional needs assessments

Key Decisions Prerequisite to Conducting Needs Assessments

In subsequent sections, a variety of needs assessment approaches will be outlined. In all cases, the generalized procedures provided in Figure 5 will guide the LVA to more successful completion of these vital data collection efforts. Regardless of which instrument(s) are used in the needs assessment process, the LVA needs to be able to answer the questions:

1. What validity does the needs assessment procedure have and how was it established? (i.e., does it measure what it actually is supposed to?)

Figure 5

A Generalized Checklist to Guide Vocational Needs Assessment Activity

<u>Person Responsible</u>	<u>Date Due</u>	<u>Activity</u>
_____	_____	1. Establish reason(s) for the needs assessment activity that is to be conducted, i.e., list the objectives for it.
_____	_____	2. Select institutional and/or community planning committees and appoint chairpersons.
_____	_____	3. Establish timelines for needs assessment process.
_____	_____	4. Establish populations/constituencies (including special populations) and samples to be assessed, i.e. define scope.
_____	_____	5. Select and/or develop the needs assessment survey instrument or procedure to be used with each population/constituency.
_____	_____	6. Select and/or develop the method of administering/distributing the needs assessment.
_____	_____	7. Collect the data and follow up if necessary to establish an acceptable response rate.
_____	_____	8. Analyze data.
_____	_____	9. Prepare findings in a report of suitable for use by professional and lay groups.
_____	_____	10. Recommend alternative strategies to address each identified need.

2. How reliable is the needs assessment procedure? (i.e., does it measure the need in a consistent manner?)

Student Assessment

Student Need

Student needs and interests assessments are good practice and provide a reasonable information source for predicting potential student enrollment. In addition, since the 1976 Education Amendments and the Missouri State Plan for Vocational Education both require that programs meet the needs, interests, and abilities of the students, a student assessment strengthens the documentation of need.

To assess individual need and interest for vocational education program offerings, several types of data should be considered. The types of data and their respective sources are listed in Table II.

Table II

Types and Sources of Data

<u>Type of Data</u>	<u>Source</u>
A. Student vocational interest	1. Student interest survey 2. Student files
B. Student needs	1. Student files 2. Follow-up surveys a. graduates b. dropouts
C. Student abilities	1. Student files (standardized test results) 2. Counselors
D. Adult student vocational interest	1. Parent/community surveys 2. Advisory committees 3. Follow-up surveys
E. Teacher perception of student interest	1. Teacher survey

Surveying Student Interest/Needs

One source of information for the vocational course offerings is through the utilization of a student survey. High schools, area vocational-technical schools, and community junior colleges should use student body surveys of their own institution and of feeder schools in assessing student needs. Typically the information necessary to identify student needs includes:

- Educational objectives - Do you plan to enroll in a vocational course?
- Vocational or career objectives - What do you plan to do as a career after you complete your education?
- Vocational program interest - What vocational program interest you most?
- Vocational program information and/or counseling needs - Do you feel you need more vocational information or counseling to help you make better vocational plans?

Local administrators may wish to use the Missouri Comprehensive Needs Survey as a preliminary career planning tool to identify student needs. This survey instrument is available through the Missouri Testing and Evaluation Service (see Finding Additional Information). However, a more specific instrument with vocational program listings would be needed to identify actual occupational interest.

Other information which should be collected through the survey includes the respondent's sex as well as his/her ethnic background. To assess student interest the survey instrument should provide a check list of present program offerings and potential new programs as well.

When reviewing the student interest survey, the LVA must bear in mind that this data is tentative in nature and subject to change. If the same basic survey instrument is used for several years, however, a discrepancy rate between student interest survey responses and actual enrollments in a particular program can be established.

Special Populations

The LVA should direct special attention in the needs assessment process to special populations. The effort to meet the vocational needs of these groups is exemplified at the national level by special funding. The following persons or groups of persons constitute special populations:

- Handicapped
- Disadvantaged
- Limited English-speaking
- Displaced homemakers
- Single heads of households who lack adequate job skills
- Homemakers who seek full-time employment
- Those who seek employment in jobs not traditionally held by members of their sex
- Inmates in correctional institutions

Special populations needs should be identified. Information concerning special populations may be obtained from the following sources:

- Student surveys
- School records
- Community surveys
- Teacher surveys
- U. S. Census reports

The decision concerning who should provide certain information on special population student needs should be made in light of the following considerations taken from Donald W. Drewes, et al., Vocational ESP Planning System (1980, p. iv-45).

- The characteristics of the population which make it special
- The extent to which the students' characteristics might make them feel sensitive to being part of a targeted survey
- The extent to which the characteristics of the students might inhibit the collection of data directly from them (e.g., handicapping conditions, limited English-speaking ability, academically disadvantaged, etc.)
- The ability of teachers to provide the information needed by the LEA

To provide access to special needs clients may require modification of facilities, equipment and additional support services. The LVA needs to consult with special needs experts to help construct a needs assessment instrument for special needs populations.

Interpreting Reality of Student Interest/Needs In Terms of Their Abilities

The reality of student interest survey results needs to be interpreted in terms of their abilities. Information identifying student abilities may be obtained from school records by reviewing achievement levels on national test scores compared to state and national norms. Additional sources of information relevant to the realism of students' needs include potential enrollment from sending school(s), the percent of school dropouts and the grades where most dropouts occur, the percent of program graduates who entered college or postsecondary training, and the percent of completing and noncompleting students who entered the labor force after high school.

Teaching Staff

An additional information source the LVA should not overlook is the institutional teaching staff. Their ideas and input should be solicited both for the sake of the information they can supply and to reinforce their professional self-image. Furthermore, faculty may also be helpful in analyzing and interpreting needs assessment data for specific programs.

Follow-up Survey

A follow-up survey of former students may also provide valuable information in identifying needs. The following items represent a sample of data to be gathered from former graduates:

- Relationship between adequacy of educational preparation and present job
- Satisfaction with present job
- Level of education and/or training completed
- Additional training needed for advancement in present job situation

The actual survey may be conducted by mailing the questionnaire to a randomly selected sample of former students. In conducting the follow-up survey the LVA should remember to select a sample from all former students and not just program completers. By sampling early leavers, the LVA may be able to identify why these students left the program.

After the student follow-up data has been collected it should be compiled. Figure 6 depicts an example of how this data can be presented for the purposes of assessing needs.

These former student follow-up surveys can be conducted in cooperation with sending schools for the area vocational-technical schools, or schools within the district of a community junior college.

Parent Preferences and Community Needs

Two groups of people whose opinions should be solicited in planning vocational education programs are parents and members of the community. These people provide the institution with an insight to the values of the community based on cultural heritage, social-economic backgrounds, and educational expectations. Also, community members, along with parents, are more likely to support, with their tax dollars, programs in which they have been involved.

This process also serves as a good public relations vehicle between the school district and the community. Additionally, both of these groups serve as a potential resource for advisory committee members for the institution.

Parents may be surveyed by sending the questionnaires home with students. Other community members should be surveyed through the mail. A cross-section of people from all social and economic, racial and ethnic, and special populations groups should be solicited.

In order to determine if those responding to the survey represent a true cross-section of the community, the U. S. Census Report Series PC(1)B and PC(1)C can be consulted (see Finding Additional Information).

Figure 7

PARENT - COMMUNITY SURVEY FOR VOCATIONAL EDUCATION PLANNING

The _____ School District is seeking your opinions regarding our educational offerings so that we might better serve the needs of the community. We would very much appreciate your cooperation in completing this questionnaire. Since your name will not be associated with the answers, it is not necessary for you to sign your name.

1. Economic Status. (Please check one.)

☐ (1) Above Average ☐ (2) Average ☐ (3) Below Average

2. Age. (Please check one.)

☐ (1) Young Adult ☐ (2) Middle-Aged Adult ☐ (3) Older Adult

3. Are you a parent of a school age child? ☐ Yes ☐ No If yes, please circle the grade level(s) of your child(ren)

K 1 2 3 4 5 6 7 8 9 10 11 12

4. Please check the following items "yes," "no," or "no opinion."

YES NO NO OPINION

- | | | | |
|--------------------------|--------------------------|--------------------------|--|
| ☐ | ☐ | ☐ | 1. The curriculum offerings in the school appear adequate. |
| ☐ | ☐ | ☐ | 2. Schools should place more emphasis on preparing students for employment. |
| ☐ | ☐ | ☐ | 3. High school students should be encouraged to seek education past the high school level. |
| ☐ | ☐ | ☐ | 4. It is the primary responsibility of the school to stress proper attitudes and work habits that students should have. |
| ☐ | ☐ | ☐ | 5. Vocational education training should be extensive enough to meet the needs and interests of the majority of students. |
| ☐ | ☐ | ☐ | 6. The school should keep the community better informed about its educational programs. |
| ☐ | ☐ | ☐ | 7. I would be willing to pay more taxes for better vocational education training. |
| ☐ | ☐ | ☐ | 8. All students should have a saleable skill after completing a high school education. |
| ☐ | ☐ | ☐ | 9. Students should be able to attend another school to get training that is not available in their local school. |

YES NO NO OPINION

- | | | | |
|--------------------------|--------------------------|--------------------------|--|
| ☐ | ☐ | ☐ | 10. The school should provide more guidance and counseling to a student about his/her future education and career plans. |
| ☐ | ☐ | ☐ | 11. Students should have made tentative career plans prior to entering the eleventh grade. |
| ☐ | ☐ | ☐ | 12. Special vocational programs should be available for disadvantaged students. |
| ☐ | ☐ | ☐ | 13. Too much emphasis is placed on students going to college. |
| ☐ | ☐ | ☐ | 14. Vocational courses should be available for adults in the community. |
| ☐ | ☐ | ☐ | 15. More vocational training would reduce the drop-out rate and aid in discipline problems. |

5. Overall, how would you rate the education received by students in the School District?

- | | |
|--|--|
| ☐ (1) Excellent | ☐ (3) Average |
| ☐ (2) Good | ☐ (4) Below Average |

6. Circle highest level of education you received for each appropriate level:

- | | |
|---|-------------------------------|
| ☐ Grade School | 1 2 3 4 5 6 |
| ☐ High School | 7 8 9 10 11 12 |
| ☐ College | 1 2 3 4 |
| ☐ Vo-Tech | 1 2 |
| ☐ Other Post-secondary | 1 2 |

7. Please rank the social and civic skills you believe students should be made aware of in school:

- | | |
|---|---|
| ☐ Etiquette and Manners | ☐ Written Communications |
| ☐ Dress & Grooming | ☐ Cultural Heritage |
| ☐ Individual Creativeness | ☐ Discipline and Work Habits |
| ☐ Civic Pride | ☐ Pleasant Disposition |
| ☐ Music & Art Appreciation | ☐ Participation in Extra Curricular Activities |

8. Please indicate areas of adult education and training that interest you:

Adapted from Peggy W. Patrick, Planning Vocational Education: A Guide for Local Administrators. Little Rock, AR: Arkansas Department of Education, Vocational-Technical and Adult Education, 1977, p. 18.

The data obtained from the survey should provide the LVA with the following information:

- Values to stress in the curriculum
- Opinions of current offerings
- Additional offerings needed
- Adult education program interest

Figure 7 represents a sample parent/community survey instrument. Modifications of this questionnaire may be made to better fit local needs.

Labor Market Demand Assessment

Overview

The 1976 Education Amendments and the State Plan for Vocational Education require that the local education agency demonstrate a clear occupational need exists for each program receiving vocational funding. To do this the LVA must estimate the supply and demand for a given occupation within the area serviced by that program.

Occupational demand data is an estimate of the number of skilled individuals who are currently needed or will be needed in the future. Occupational supply on the other hand, is an estimate of the number of individuals available from all sources who are likely to enter the labor market with specific skills. Comparisons of occupational supply and demand data sources may reflect relative balances or imbalances in different occupational areas.

To determine occupational needs, the LVA must assess both occupational demand and supply within the school district. Occupational supply and demand for the state (and five metro areas) may be obtained from the MOIS Occupational Data Book. Furthermore, the Missouri Occupational Information Coordinating Committee (MOICC) can assist in a given area of the state. However, predicting the occupation demand for certain local areas is more difficult.

Employers in a local area may be questioned or surveyed about labor market needs. However, the LVA is cautioned that this procedure does not yield highly reliable information. For a variety of reasons, local businesses may not want to, or be able to respond to a comprehensive questionnaire on future occupational demand. Precise surveys that target on a few specific, and typically entry level, occupations are much more apt to yield reliable information (see Figure 8). Consequently it is suggested that the LVA first review the MOIS Occupational Data Book and then contact the local/regional Job Service Office manager and work with him/her to obtain local demand information.

Figure 8

Business/Industry Survey

Name of school district initiating survey: _____

Name of Business being surveyed: _____

Position of person completing survey: _____

OCCUPATION/JOB UNDER CONSIDERATION

 (Occupational title/name) : (Basic Description)

Training Requirements

Major skills/competencies needed
for this occupation

High school or less _____

On the job training _____

Vocational
(secondary) _____Advanced vocational/
technical
(post-secondary) _____

Apprenticeship _____

Qualified candidates for this position are, Scarce__ Adequate__ in Over-
supply__Do you have a need for qualified candidates to meet federal contract quotas
from special groups? Yes __ No __ If yes, specify group(s) _____

What agency would you contact to fill an opening for this occupation?

Employment Security Office __ High School __

Employment agency __ Vocational School __

Other (please specify) _____

Would your organization be interested in a cooperative training program
for this occupation with the local school? Yes __ No __

The local/regional Job Service Office will not have information on all jobs available in a geographic region, however, it will have the most reliable information obtainable. Some of the Job Service Offices also have statistical specialists who can assist the LVA in planning.

A comparison of these sources of demand information will allow the LVA to achieve a more realistic view of occupational demand than what is available from either source. If the LVA is still in need of additional local data, it is suggested he/she use a survey instrument similar to Figure 8.

The reader will note that a question relating to meeting federal government quotas is included on the instrument. This provides the institution with an opportunity to inform the employer that you may be able to assist him/her in employment mandates associated with federal contracts by providing qualified candidates from the special populations groups for employment.

Conducting the Employer Survey

Even on a limited scale as suggested in this guide, this survey should be well planned and orchestrated. The following steps are suggested for conducting the survey.

1. Prepare a listing of related businesses, industries, and agencies within the geographic area for a given occupation. The following documents should be consulted:
 - yellow pages of the telephone directories in the geographic area to be surveyed
 - directories of manufacturing associations, the Chamber of Commerce, etc.
 - listing of organizations and agencies contacted by the United Fund
2. Determine the technique(s) to be used for data gathering. The following techniques are most popular:
 - personal interview
 - mail survey
 - telephone
3. Develop a timetable for completing the survey.
4. Design the instrument(s) to be used.
5. Select a small sample of firms to pretest the instrument(s) and to provide experience for data collectors.
6. Analyze the pretest data to determine whether the instrument(s) is obtaining valid and reliable data.
7. Revise the instruments, if necessary, on the basis of pretest results.
8. Conduct the survey by method selected in Step 2.
9. Compile results and develop final report.

Of the three survey techniques, the personal interview would produce the most reliable results, however, this method would also be the most expensive. The LVA would have to weigh the cost versus reliability of methodology.

Table III
Federally Fundable (PL 94-482) Vocational Activities

- I. Basic Grants
 - A. Vocational education programs
 - 1. Regular programs (reimbursable elements: instructional salaries, equipment, travel, and ancillary services, i.e. contracted services and vocational education administration)
 - 2. Programs serving the disadvantaged
 - 3. Programs serving the handicapped
 - B. Construction of area vocational education school facilities
 - C. Work-study programs
 - D. Vocational education of displaced homemakers and other special groups, support services for women, and day care services
 - E. Sex equity personnel (state staff)
 - F. Energy education programs
 - G. Placement services
 - H. Industrial arts
- II. Program Improvement and Supportive Services
 - A. Program improvement
 - 1. Research
 - 2. Innovative and exemplary projects
 - 3. Curriculum
 - B. Vocational guidance and counseling
 - C. Vocational education personnel training
 - D. Grants to overcome sex bias
- III. Special Programs for the Disadvantaged
 - IV. Consumer and Homemaking Education (reimbursable elements: instructional salaries, instructional equipment, travel, and ancillary activities, i.e. personnel training, curriculum, research, evaluation, special demonstration projects, exemplary projects, local supervision)
 - V. Special Projects: the State Director of Vocational Education may approve and fund special projects in any of the above categories.

Consult with Career and Adult Education vocational finance personnel and/or the latest state plan for specific funding availability.

Accessing Resources

The role of the LVA is to access the broadest variety of program support resources to address the widest possible range of client needs. This section provides the LVA with information about resources available to the institution from federal, state, and local sources as well as private ones.

State and Federal Funding Sources

State and federal funds represent the traditional source for vocational education monies. As stated in the five-year Missouri State Plan for Vocational Education (1978-82, p. 65), state and/or federal reimbursement for vocational education is on the following basis:

State and/or federal aid is provided for partial or full reimbursement of funds expended by public educational agencies for approved vocational and career education programs. These programs may be designed to serve the needs of secondary, postsecondary, adult disadvantaged, or handicapped target population groups. Reimbursement for approved occupational programs is limited to instructional salaries, equipment, and professional travel. Additional provisions are made for the support of salary and travel of approved vocational administrative or ancillary personnel in area vocational schools, junior colleges, and selected disadvantaged and handicapped programs. Reimbursement for vocational building construction is limited to area vocational school sites designated by the State Board. Special projects such as research, innovation, etc., will be considered on the merits of the application.

Federal funding is permissible for the categories shown in Table III. However, the annual amount varies from program to program and therefore, Career and Adult Education vocational finance personnel should be consulted for specific amounts available each year.

Applying for State/Federal Vocational Funds

Existing Programs. In order for an LEA to receive vocational funding from state and/or federal sources, an annual application must be filed. Application information includes:

- evidence that the application was developed in consultation with other educational and training resources available in the area to be served and with local advisory council input.
- description of the needs of potential students, and how and to what extent the proposed program will meet their needs.
- description of how the proposed activities relate to the employment and training programs conducted in the area by a CETA prime sponsor (if any) to assure coordination in meeting the vocational training needs of the area or community.

Figure 9

Sample Program and Service Description*

	INDEX: GRADE/AGE : Adults TARGET GROUP : Dropouts TYPE OF SERVICE : Academic PROGRAM EMPHASIS: Basic Skills, English as a Second Language
PROGRAM NAME	Adult Basic Education
AUTHORITY	The Missouri State Plan for implementing Title III of the Adult Education Act of 1966 (P.L. 91-230, as amended) establishes a program of adult basic education.
PROGRAM DESCRIPTION	Adult basic education instruction is designed to teach persons 16 years of age or older to read and write English and to substantially raise their educational level. The purpose of the program is to expand the educational opportunities for adults and to establish programs that will enable all adults to acquire basic skills necessary to function in society and allow them to secure training that will enable them to become more employable, productive and responsible citizens as well as allowing them to continue their education to at least the level of completion of secondary school.
ELIGIBLE PARTICIPANTS	Eligible student--an adult 16 years of age or older not presently enrolled in school with less than a high school education or its equivalent.
METHOD OF FUNDING	Grants are made to Local Educational Agencies based on contact hours.
ALLOWABLE COSTS	Staff salaries, supplies, audit and employee benefits, approved travel, telephone, equipment and indirect costs
ELIGIBLE APPLICANTS	Local educational agencies
APPLICATION PROCEDURES	Application is made after a community survey has been conducted to determine need in the area to be served. Application consists of a local educational plan and budget on forms supplied by the Director of Adult Education.
CONTACT PERSON	Director, Adult Education Department of Elementary and Secondary Education P.O. Box 480 Jefferson City, Missouri 65102 Telephone: (314) 751-3504

*From Resource Guide for Educational Programs and Services, Missouri Department of Elementary and Secondary Education, Jefferson City, Missouri. Many other funding sources are listed herein.

- description of the relationship between the proposed program(s) to be conducted with funds under this act and other program(s) in the area or community which are supported by state and local funds.

New or Expanding Programs. Eligible institutions that are expanding or adding a new program must submit a proposal for each program by occupational title to the State Director of Vocational Education. However, institutions offering a new or expanded vocational program at the associate degree level must submit an application as found in the Missouri Department of Higher Education's document, Program Review Policies and Procedures. A copy of this form should then be sent to the State Director of Vocational Education by the applicant. This document, and the State Plan for Vocational Education should be consulted for application deadlines.

How Are DESE Funding Decisions Made?

Federal money is not equally allocated to local districts, rather a specific formula is used. However, an amount (determined annually) will be distributed to all approved programs. Federal dollars are distributed based on a predetermined formula. This money is often referred to as formula money. Although distribution of federal dollars is based on several factors, the two most important factors are the relative ability of the district to pay and the concentration of low-income families. Other factors incorporated into the formula are allowances for economically depressed areas and consideration for programs designed to meet new and emerging occupational needs. (A detailed explanation of the funding formula is found in the State Plan for Vocational Education).

Matching state monies are provided for regular vocational programs for instructional salaries and equipment, travel, and ancillary services. The current State Plan for Vocational Education outlines reimbursement percentages and specific requirements.

What Other State and Federal Education Resources are Available?

The Department of Elementary and Secondary Education has developed a publication entitled, Resource Guide for Education Programs and Services. This document is a concise, cross-referenced directory of funding sources and technical assistance for Missouri school districts. A sample page is shown in Figure 9. Administrators are encouraged to refer to this document to identify alternative and nontraditional funding sources for vocational education, such as:

- programs for disadvantaged and handicapped.
- vocational contracted services.
- vocational education equity program.
- vocational education research.
- Youth Employment and Training/Comprehensive Employment and Training Act.

Regular Local Funding Sources

Normal Budgeting

Because the bulk of financial decisions are made by the local board, this section is provided to assist the LVA in developing the best case for vocational education's budget justification and for local approval of programs.

LVA's should enlist the aid of the school/business manager and individual program instructors in preparing the annual budget. The program instructors should be asked to prioritize equipment and supply purchases in an effort to distinguish essential purchases for their program.

The following steps represent a typical sequence that the LVA might go through in developing the vocational program budget.

1. Program budgets are developed by the instructor/coordinator
2. LVA (or designate) collates the preliminary budget requests for all programs
3. LVA (or designate) reviews line items for each program and presents or forwards requests for expenditures to local board
4. Board advises LVA as to the percentage of the request which can be met
5. If less than 100%, LVA must review funding priorities and make appropriate cuts to bring the budget in line with the available dollars
6. Adjusted budget resubmitted to the board
7. Board approval
8. Forms submitted to the State Department
9. Matching fund items are approved by the State Director of Vocational Education

Items which are potentially eligible for reimbursement for federal and/or state vocational funding are designated on the budget. Figure 10 depicts a sample budget.

Figure 10
Program Cost Analysis Worksheet

Program: <u>Auto Body</u>			
Cost Category	Local Contribution	State & Federal Reimbursement	Total
A. Personnel			
1. Teaching (10 month)	\$7,500	\$7,500 (FV-1)	\$15,000
B. Equipment	3,500	3,500 (FV-4)	7,000
C. Supplies & Materials	2,000		2,000
D. Facilities			
1. Office			
2. Classroom			
3. Laboratory			
E. Maintenance	2,000		2,000
F. Travel	500		500
G. Miscellaneous (postage, telephone, printing, duplica- ting, etc.)	500		500
Total	<u>\$16,000</u>	<u>\$11,000</u>	<u>\$27,000</u>

Figure 11

Other Useful Resources		
Type of Resource	Agency	Source
1. Speakers, volunteers, monetary contributions	Alumni and Friends of the institution	Local school personnel files or contributors file
2. Volunteers, in-kind services, monetary contributions, scholarships	Community agencies (civil organizations)	Local telephone directory
3. Supplies, equipment, volunteers, guest speakers, cooperative teaching programs, monetary contributions, in-kind services	Local and regional business/industry and labor organizations	Local telephone directory Chamber of Commerce Advisory council
4. Supplies and equipment	Missouri State Agency for surplus property	Name Newsletter issued periodically See <u>Finding Additional Information</u>
5. Supplies and equipment (school "wish list")	National Association for the Exchange of Industrial Resources	See <u>Finding Additional Information</u>
6. Equipment	Tools for Schools Loan Program	Defense Industrial Plant Equipment Center Memphis, Tennessee See <u>Finding Additional Information</u>
7. General monetary grants	The Foundation Directory; Annual register of grant support	See <u>Finding Additional Information</u>
8. General monetary grants	Grants Data Base (The Foundation Grant Index; Grants--computer information retrieval)	On Line Search Service Ellis Library University of Missouri-Columbia See <u>Finding Additional Information</u>
9. Monetary grants for handicapped students	Discretionary grants under PL 94-142	Roland Werner, Division of Special Education, DESE
10. Monetary grants for CETA clients	U.S. Department of Labor	Hermann Wallace, Missouri Supervisor, Employment and Training Administration, Office of CETA, Kansas City, Missouri See <u>Finding Additional Information</u>

Matching Funding

After the budget is approved by the board, the LVA should await notification from the State Director of Vocational Education for matching fund item approval. Even when funding has been approved for items such as major equipment purchases, the LVA must purchase the item with local monies before the state will reimburse. Because of this, the LVA must exercise caution in making major purchases to avoid putting his/her institution in a difficult cash-flow situation. This can be avoided by making payment for major purchases close to one of the reimbursement deadline dates.

Other Useful Funding Sources

The innovative LVA will generate resources for his/her institution through several sources in addition to those already described. Figure 11 lists some suggested resources and their source.

Curriculum Resources

New programs, and/or modification of existing courses require the development of new curriculum materials. Before investing time and effort in writing your own materials, the LVA should consider accessing materials which have been developed by professionals.

Two sources of vocational instructional materials in Missouri are the Media Center, and the Instructional Materials Laboratory (IML) (See Finding Additional Information). The Media Center produces audio visual teaching aids for individualized instruction in many of the service areas in vocational education.

IML produces materials and teaching aids in all service areas within vocational education, including special needs and sex equity. A library of vocational instructional materials is also maintained by the IML. All publications contained within this library system are available on a loan free basis.

A resource agency for curriculum development information is the Vocational-Technical Education Consortium of States (V-TECS). V-TECS produces worker-validated catalogs of performance objectives and guides may be used as a source for program planning and development of curricula.

Cost/Benefits of Programs

The cost of individual programs should be reviewed in terms of benefits received. Consideration must be given not only to financial cost but to programs that result in the greatest benefit to all students, including those from special populations. This process may assist the LVA in identifying additional internal resources. The following represent some suggested methods of analyzing program cost and benefits but they by no means represent all possibilities a local district may wish to consider.

Total Program Cost

One consideration in the cost analysis is the total program cost. Here, the actual outlays for each program's teachers and support staff salaries, equipment and materials, facilities, and operating and maintenance costs would be reviewed.

Cost Per Student

This analysis derives the cost per FTE (Full Time Equivalent) student by dividing the total program cost by the number of students enrolled (or by the number of completors, or by direct and related placements). The LVA might also want to calculate the per-student cost by component cost categories as well. Useful categories would be, (1) the administrative cost per student, (2) the instructional cost per student, and (3) the ancillary (support) service cost per student for each program. This process might help identify problem areas within a program or the extent of service available to special populations.

Ease of Program Implementation

A cost/benefit factor to consider in modifying or starting a new program is ease of program implementation. In addition to dollar-amount cost, this factor would include consideration for the time required to initiate the program. If existing facilities or equipment could be adapted to start a new program, it would be highly beneficial in terms of time, e.g., ease of implementation.

Degree of Need

One cost/benefit ratio involves dividing the cost of a program by the degree of need for it. This degree of need is established through reconciliation of labor market demand information and student/community interest, and parent preference (see Acting on Your Information section).

Potential Success of Program

Another cost/benefit criterion is represented by the potential success of a program. It would not be cost-effective to offer a program if only a few students enrolled or if acceptance by industry is unlikely. The potential enrollment success of a program can be determined from reviewing the student/community interest survey data, from advisory council input, and from an examination of normal industrial practice.

Acting On Your Information

After accessing available information, and after collecting necessary information not otherwise available, the LVA must now consolidate the inputs and make decisions. Essentially this process involves the specification of a plan that optimally addresses:

- labor market demand.
- student/community interest.

This planning is made more difficult because the LVA must build into his/her decision making, inputs:

- from evaluations of existing vocational programs.
- describing the availability of resources to implement the plan.

As an overall process then, planning involves, as shown in Figure 12 the major steps of:

Step 1:
consolidating information.

Step 2:
analyzing information, and then:

- identifying needed new programs
- identifying satisfactorily operating programs
- identifying programs that need strengthening
- identifying programs that should be terminated
- identifying major areas of vocational activity/service that need attention

Step 3:
prioritizing the actions needed.

Step 4:
developing a program of work to implement priority actions.

Details of the various tasks within the large steps depicted in Figure 12's overview of the vocational planning process are provided in Figure 13. The following sections of this guide will provide key features of each step to the LVA.

Step 1

Consolidating Information

A. Consolidating demand/interest/need inputs

Because LVAs typically use a large variety of information sources, it is important to consolidate each source's key points. In this way the LVA will be better able to:

- identify overall trends.
- identify key voids or missing data.
- develop an overview of who is supplying what information.
- incorporate the concerns of special populations.

Figure 12
The Vocational Planning Process Overview

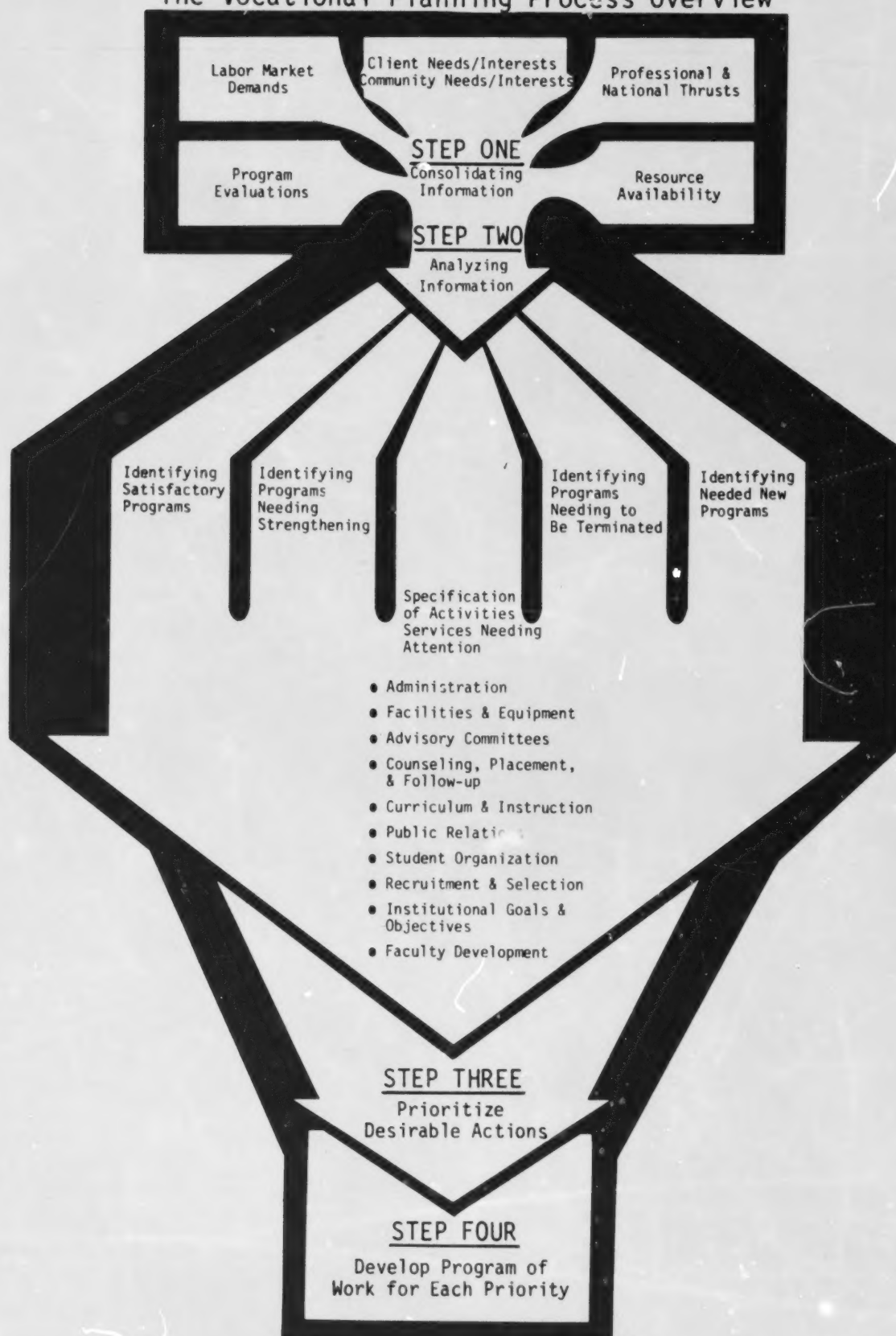


Figure 13
Detailed Vocational Planning Model

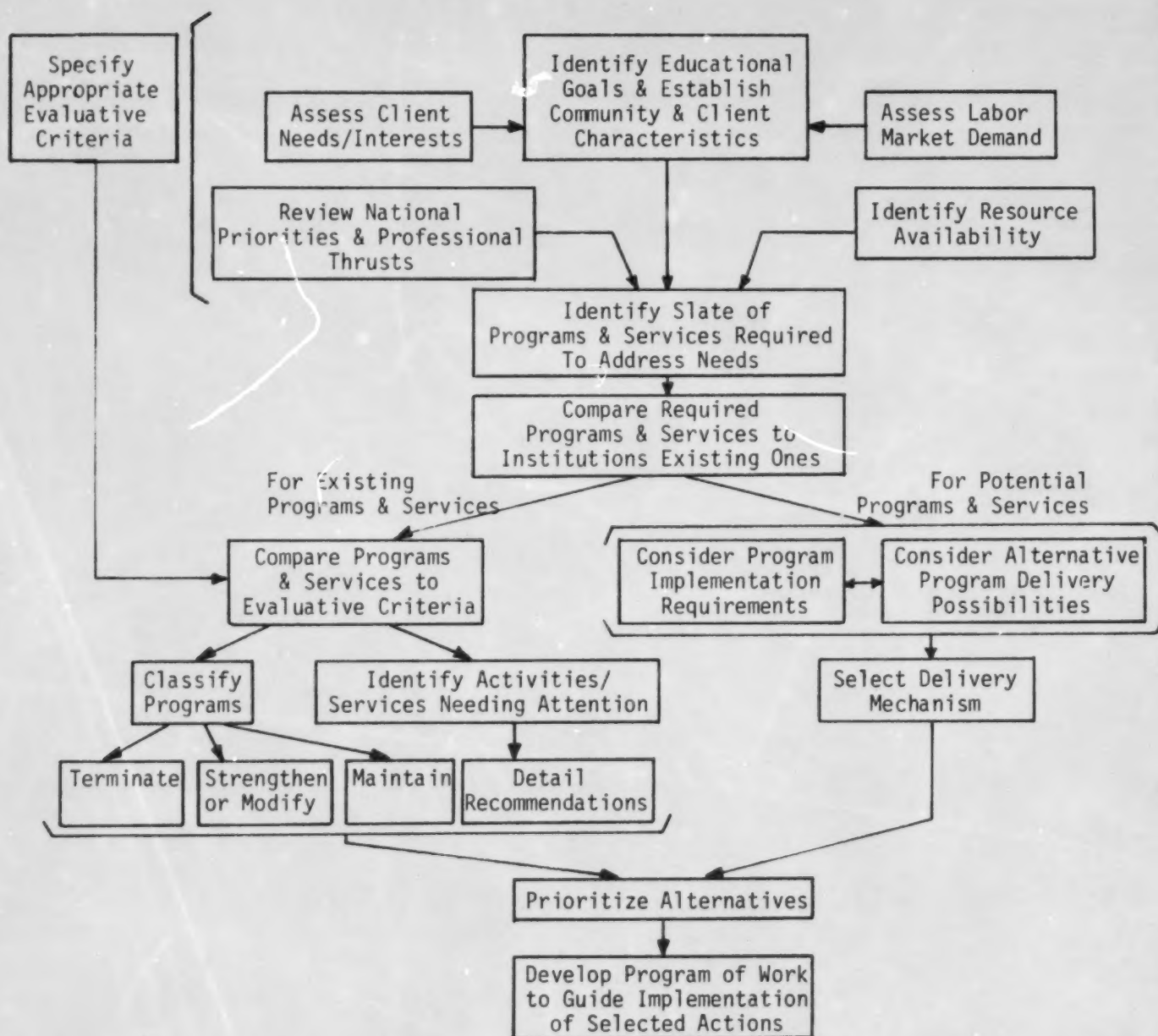


Figure 14
Consolidating Client Needs/Interests with Labor Market Demands

	INPUT INFORMATION						CALCULATIONS	
	Student Interest/Need		Community and/or Parent Interests	Local Business & Industry Labor Market Demand	Faculty Survey	MOIS Demand Ranking	Sum of Weighted Ranks	Overall Rank of Programs by Demand
	Sending School A	Sending School B						
Weight assigned to each input (must total 100)	10	15	15	25	15	20	100%	Lowest number indicates programs most in demand
Programs Offered : : :	Reported Rank of Program Assigned Weight	$\frac{R}{W}$	$\frac{R}{W}$	$\frac{R}{W}$	$\frac{R}{W}$	$\frac{R}{W}$	$\sum (\frac{R}{W})$	
For example, using fictitious data								
Air Conditioning	5/10	5/15	2/15	1/25	1/15	2/20	1.17	2
Auto Mechanics	3/10	1/15	3/15	5/25	4/15	3/20	1.18	3
Dietician Technician	4/10	3/15	4/15	6/25	5/15	5/20	1.69	5
Horticulture	2/10	2/15	6/15	2/25	2/15	1/20	1.00	1
Mid-management	1/10	4/15	1/15	8/25	6/15	6/20	1.45	4
Secretarial	6/10	8/15	8/15	4/25	8/15	8/20	2.76	8
Electronics	7/10	7/15	5/15	3/25	3/15	4/20	2.02	6
Drafting	8/10	6/15	7/15	7/25	7/15	7/20	2.66	7

Step 1

While different compilation methods are possible, generally they all result in two primary indicators: client needs or interest and labor market demand. It is recommended that from these two indicators, the LVA develops a single list of programs ranked on a weighted combination of both inputs. Figure 14 provides an example of one form that might be used to consolidate student/community needs. To use it, the LVA:

1. sets up a chart with columns representing available need/demand/interest information sources.
2. assigns weights as to the importance of each source (this will vary locally).
3. lists programs offered, and/or those considered as possible offerings, and then enters the appropriate ranking of interest/need/or demand in the row to the right of each program.

Note, instead of specific number ranking, the LVA may instead wish to categorize each need/interest/demand entry by high (5 points), medium (3 points), low (1 point).

4. divides each cell's ranking by its weight and sums the result by program.
5. ranks the sum of each program's weighted ranks, as generated by #4 above, to yield a composite indicator of overall demand/interest/need for each program.

B. Consolidating student/client characteristic input

LVA's in today's environment also find it useful to have a convenient summary of the key characteristics of their clients. This information is often requested by local, state, and federal sources. Figure 15 provides a sample of one such summary although other formats may be equally usable.

C. Consolidating resource availability input

On the basis of procedures outlined in the Securing Planning Information Section of this guide, the LVA will have collected information as to what resources are available from which agencies for which programs/services/or other vocational activities. Now, at the consolidation stage of the overall planning process, the LVA simply needs to review previous input as to the availability of resources and evolve an overall sense of the local-state-federal mix and the ends to which such resources may be applied. A review of the state's annual and five year plans for vocational education may be useful at this time also.

D. Consolidating program evaluation input

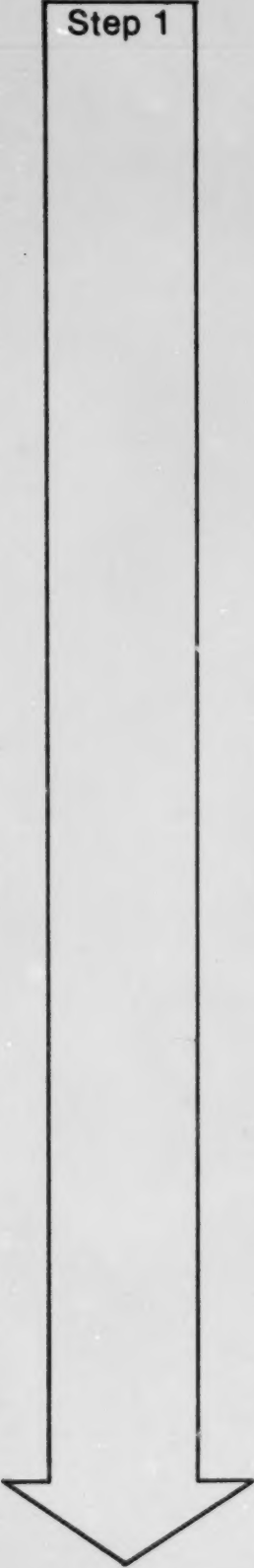
Because vocational planning involves extensive review and evaluation of what currently is being offered, the results of

Figure 15
Institutional Population Data Profile Summary*

School _____ Year _____																	
Grade Level	Sex		Race				Special Needs			Dropouts from previous yr.	Standard Test Achievement			Reported Interest in Future Level of Education			
	M	F	Black	White	Hisp.	Other	Disadv.	Hndcp.	LESA		Local norm	State norm	National norm	H.S.	Vo-tech or 2-yr	4-year college	Professional 4-yr coll.+
7th																	
8th																	
9th																	
10th																	
11th																	
12th																	
Adult																	
Post-sec., yr. 1																	
Post-sec., yr. 2																	
Overall pop.																	
% stu- dents of pop.																	
Add'l. poten. stud's.																	

*It would also be useful to compile a profile of available information for those in the community served by the institution.

Step 1



such evaluations form useful inputs to the planning process. Such inputs come from:

- vocational program completer follow-up surveys.
- vocational program leaver follow-up surveys.
- advisory committee recommendations.
- employer follow-up (satisfaction with employees from program).

If the school or institution makes it a policy to develop an annual evaluative report, then the LVA's task is much simplified at this point. Otherwise he/she must now assemble the available information in such a way as will locally support the decisions that will be made in the next planning process step, namely to:

- maintain an existing program.
- improve/modify existing program.
- terminate an existing program.

E. Consolidating Labor Market Demand Input

To achieve vocational education's goal of helping people prepare themselves for occupations, the LVA necessarily must know the labor demand that exists in the community/region served by his/her school. This information can be derived from a host of sources as described in the Securing Planning Information section of this guide. But because of the diverse nature of these information sources, they do need to be summarized to yield an overall picture. Figure 16 provides the LVA a convenient way to achieve such a summary.

For existing vocational programs in his/her institution, as well as for those in other institutions serving the same region, the LVA:

1. lists the programs offered (column 1).
2. refers to the statewide MOIS compilation and then enters (in column 2) adjusted supply and demand figures (as per instructions in the Missouri Occupational Data Book).
3. calculates (or selects from MOIS compilation when available) regional supply and demand data (column 3).
4. lists local supply and demand information (column 4) by:
 - specifying source of data.
 - indicating extent of supply, usually for previous year.
 - indicating extent of demand from employees, etc.
 - specifying the method used to verify local demand data.
5. ranks statewide, regional, and local supply--demand differences with the highest rank (1) being assigned to the occupation/program with the greatest size of under-supply.

Figure 16
Labor Market Demand Summary

1	2			3			4					5
	Statewide MOIS Summary			Regional ^A (County, SMSA) Data			Local Data					Overall Undersupply Rank ^B
	Supply	Demand	Diff. Rank	Supply	Demand	Diff. Rank	Source	Supply	Demand	Verification	Diff. Rank	
Existing Programs (in institution)												
1. Nurse Aide												
2. Auto Mech.												
3.												
4.												
5.												
Regionally Avail- able Programs												
1. Ag. Mech.												
2. Dental Tech.												
3.												
4.												
High Demand Programs (not currently offered by in- stitutions in region)												

A. Regional Demand Calculation Suggestions

Method 1. $\text{Statewide Demand} \times \frac{\text{Population Served by School}}{\text{Missouri Population}} = \text{Regional Demand Approximation}$

Method 2. $\text{Statewide Demand} \times \frac{\text{School's Last Year's Number of Graduates}}{\text{Total Missouri Supply of Graduates}} = \text{Regional Demand Approximation}$

Note, the number of last year's graduates (method 2) may be adjusted by the placement rate for the occupation in question. To do this, substitute the number of graduates the school placed for the number of last year's graduates, i.e.,

$\text{Statewide Demand} \times \frac{\text{Number of Graduates Placed by School}}{\text{Total Missouri Supply of Graduates}} = \text{Regional Demand Approximation}$

B. Overall Undersupply Rank = (statewide demand rank x .2) + (regional demand rank x .3) + (local demand rank x .5)

Note, the weighting of 20% state, 30% regional, and 50% local for demand values can justifiably vary from program to program depending on the LVA's knowledge of the extent to which a given program supplies the state, region, or locality.

Step 1

6. calculates overall undersupply rank by using the formula footnoted (B) in Figure 16. If appropriate, the LVA adjusts the weighting to reflect the actual situation.

F. Identifying national priorities and professional thrusts.

LVA's also are encouraged to consider national priorities for vocational education as well as those thrusts being highlighted by advocacy groups such as the American Vocational Association and the National Council of Local Administrators. These thrusts and priorities are frequently the key to receiving special funding and/or consideration. Often, too, they reflect impending changes in law, regulation, and/or operating procedure.

The best sources for information as to national and professional priorities are:

- the State Plan for Vocational Education
- contact with state career and adult education division personnel
- professional conferences, e.g. Missouri Vocational Association and American Vocational Association
- journals such as Voc Ed, MVA Reporter, Manpower and Vocational Education Weekly
- inservice and preservice courses, workshops and seminars
- federal announcements such as found occasionally in the Federal Register

Step 2

Analyzing Information

With a consolidated set of information available, such as would result from Step 1, the LVA can now analyze it (as shown in Figure 12, The Vocational Planning Process Overview). Essentially this step includes the identification of options and alternatives that best address the needs and problems revealed by the analysis. Typically the LVA would:

- identify existing vocational programs that are operating satisfactorily.
- identify existing vocational programs that need strengthening or modification.
- identify existing vocational programs that need to be terminated.
- identify new vocational programs that need to be offered.
- specify vocational activities and/or services that need attention.

Figure 17
Program Evaluation Comparisons

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1	2	3	4	5
PROGRAMS EVALUATED	Number of Standards ^a Applicable to Pro- gram	Number of Standards Satisfactorily Met	Proportion ^b of Stan- dards Satisfactorily Met	Rank of Program Quality
Auto Body	7	3	.43	10
Auto Mechanics	7	7	1.00	1
Cabinetmaking	7	6	.85	3
Welding	8	5	.63	8
Ag. Mechanics	7	5	.70	4.5
Clerk Typist	8	4	.50	8.5
Nurse Aide	10	5	.50	8.5
Display Specialist	6	4	.67	6.5
Cosmetologist	7	5	.70	4.5
Data Entry	7	6	.85	2
Home Economist	6	4	.67	6.5
Overall Vocational Program Quality Indicator			$\{ 7.00 \div 11 = .64$	

a. Standards, indicators, criteria for program evaluation may come from the Division of Career and Adult Education's self-evaluation instruments, from the Program Evaluation Project Handbook, from the National Center for Research in Vocational Education projects, or from locally developed procedures.

b. Proportion = Column 3 $\div$ Column 2

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Step 2

A. What do the program evaluations indicate?

In individual vocational program evaluations, LVAs have available to them a powerful source for planning information. If such evaluations are carried out in detail every five years and then supplemented on an annual basis then the maximum value will be derived.

A variety of program evaluation strategies are available to LVAs. These include:

- self-evaluation instruments available from the Division of Career and Adult Education
- the Program Evaluation Project-developed instrument set of standards and indicators. Note, these are not yet formally adopted but their developmental use is appropriate; details are available from C&AE's Research Coordinating Unit.
- a variety of instruments available from the National Center for Research in Vocational Education.

In all cases, the evaluations call for a judgment to be made as to the extent to which a program meets individual criteria, standards, or indicators. This provides the LVA with a convenient way of summarizing program evaluations for comparative purposes. Figure 17 depicts one approach to such comparison. To develop this summary, the LVA:

1. lists programs presently offered (column 1).
2. enters the number of evaluative standards/criteria applicable to each program (column 2).
3. identifies the number of such standards/criteria that were met at a locally established, but justifiably, satisfactory level. If desirable some standards/criteria may be weighted at this point to account for differences in importance of each (column 3).
4. calculates the percentage of standards/criteria satisfactorily met by each program (column 4).
5. ranks each program according to the percent of standards/criteria met.

B. What does the evaluation of vocational activities and services, across all programs, indicate?

Because vocational education involves not only program, i.e., curricular offerings, but also a comprehensive slate of across-the-board services, the LVA also needs to plan and evaluate these. Fortunately, much of this was done in the previous program evaluation, so now the LVA simply needs to summarize the evaluations of these

Figure 18

Summary of Vocational Activity/Service Performance

1	2	3	4	5	6
Major Categories of Vocational Activity and/or Service ^A	Weight assigned to each Category*	Number of Standards Applicable to Category	Number of Standards Satisfactorily Met	Proportion of Standards Satisfactorily Met ^B	Weighted Indicator of Performance ^C
Serving Special Populations	10	15	12	.80	8.00
Curriculum & Instruction	25	30	20	.67	16.75
Administration	10	10	8	.80	8.00
Facilities & Equipment	15	20	6	.30	4.50
Student Organizations	5	5	4	.80	4.00
Public Relations	5	5	0	.00	0.00
Placement & Follow-up	5	10	6	.60	3.00
Student Recruitment & Selection	5	5	1	.20	1.00
Guidance & Counseling	10	10	8	.80	8.00
Philosophy & Goals	5	5	2	.40	2.00
Ancillary Services	5	10	9	.90	4.50

must total 100

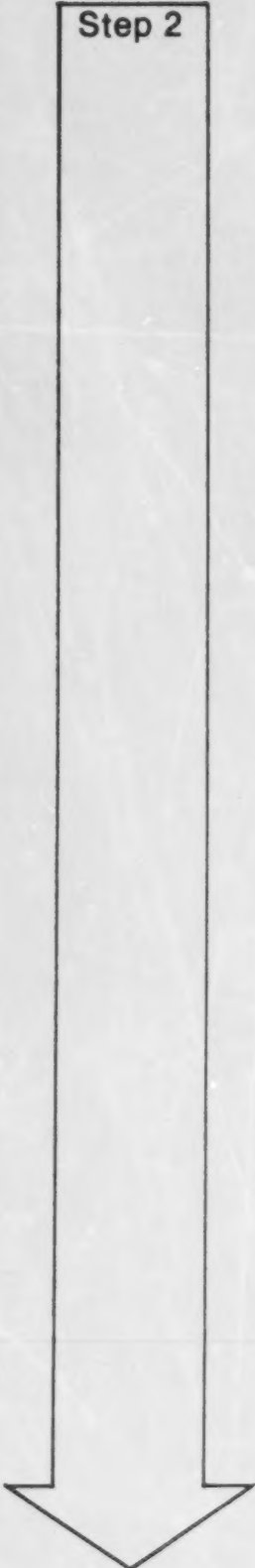
A. Categories may be those in C&AE's self-evaluation instruments, those proposed by the RCU available Program Evaluation Project handbook, or locally developed ones.

B. Proportion = Column 4 ÷ Column 3

C. Weighted Performance Indicator = Proportion x Column 2

*Weight assigned may vary with local institution. Weights assigned on this figure are for demonstration purposes only.

Step 2



major categories of vocational service. One grouping of services or categories of vocational activity includes:

- Serving Special Populations
- Curriculum & instruction
- Administration
- Facilities & equipment
- Student organizations
- Public relations
- Placement & follow-up
- Ancillary services--support staff, etc.
- Advisory committees
- Student recruitment & selection
- Guidance & counseling
- Philosophy & goals

Typically, each question, indicator, criterion or standard used in program evaluations may be assigned to one of the above categories. Then the LVA can, in a way quite similar to section A of step 2's program evaluation, identify how well vocational education is performing in each of these important across-the-board dimensions. Figure 18 illustrates a sample form that might be used to summarize such information. To use this, the LVA:

1. identifies the major across-the-board categories of vocational activity/service he/she wishes to compare (column 1).
2. assigns each category a weight that appropriately reflects the significance of that category in the overall picture of vocational education at that specific institution (column 2).
3. identifies the number of standards/criteria/indicators on the evaluation instruments that are applicable to each category (column 3).
4. reviews the evaluation results and inserts the number of standards satisfactorily met for each category (column 4).
5. calculates the proportion of standards satisfactorily met (column 5).
6. calculates the weighted performance indicator that represents the extent to which vocational education programs do well on each category. By subtracting this amount (column 6) from the overall assigned weights (column 2), the LVA would get a measure of shortfall that when ranked by size would tell him/her which category is in greatest need of attention (in this case facilities & equipment).

LVA's will quickly recognize that the review of evaluation results for planning purposes involves not only the mere tabulation of percentages of standards met, but also analysis of which standards are met for which programs and for which categories of

Step 2

service/activity. This is a process that cannot be charted out conveniently, because it needs to be tailored specifically to the local situation. As such, the LVA will need to consider:

- Morale
- The extent to which special populations will require such services
- Community support
- Economic trends
- National vocational and other thrusts
- Professional imperatives
- . . .

C. What does labor market demand indicate?

Vocational education's mainstream is certainly directed at preparing people for work. It follows then, that the LVA must know what kind of vocationally relevant labor market needs exist in the community/region serviced by his/her institution. Figure 16 consolidated this input but now the LVA must interpret and/or adjust the overall undersupply rankings to account for:

- the reliability and validity problems associated with local labor market demand surveys.
- the mobility of program graduates.
- the influx of trained personnel from other regions.
- overall or local economic trends that have bearing on vocational placement opportunities.
- other forces that impact on local and regional situations.
- the need to serve special populations.

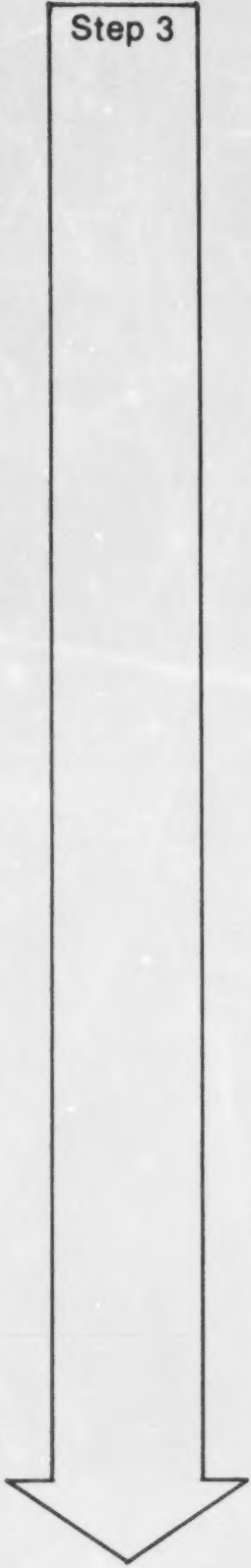
Step 3

Prioritizing Desirable Actions

At this point the LVA will have access to considerable information in a consolidated form (from step 1). Also, a variety of analyses, either those presented as possibilities in step 2 or alternatives developed by the LVA, will also be available. Typically these efforts will result in more interesting and needed actions than can feasibly be accomplished. This necessarily means that some prioritization will occur.

Prioritization is always a difficult task--particularly when choices need to be made between similarly desirable alternatives. Furthermore, careful planning requires the elimination of personal biases as much as possible. While mathematical approaches guard against such difficulties, they are typically too rigid and hence unsuited for specific situations. What then does the conscientious LVA do?

Step 3



One suggestion is to assemble as much as possible of the previously derived and calculated summary information on one planning document. This enables the LVA to gain an overview of the complex social and economic system he/she is serving. Figure 19 suggests one way that the LVA can compile an overview. To do this, the LVA:

1. lists programs currently offered as well as those most likely to be considered for implementation.
2. inserts previously calculated data in columns shown as being derived from Figures 14, 16, 17, and 18.
3. develops additional columns for major considerations that have special relevance for the local situation.
4. assigns high, moderate, or low rankings to indicate each existing and potential program's:
 - ease of implementation, i.e., the availability of space, equipment, instructors, etc.
 - likelihood for securing funding, i.e., state, federal, and/or local dollars, or potentially even program sponsorship by the private sector.
 - relationship to the institution's philosophy and goals.
5. summarizes the across-the-board categories of activity/service in terms of each one's relationship to:
 - existing programs, i.e., is curriculum improvement needed for a given program? Does a special program specific advisory council need to be established?
 - programs not currently offered, i.e., would a new program be a good recruiting tool? Can the proposed program be effectively administered with the existing structure?
 - special population needs, i.e., are special actions needed to serve disadvantaged, handicapped, LESA, non-traditional and otherwise targeted groups?

Once this overview is available, the LVA can then begin to formulate tentative actions as suggested by the columns at the far right of Figure 19. It could be most appropriate that at this point, the LVA can usefully consult with his/her local advisory council. It should be noted that this must be approached carefully because the intent is not to abrogate the LVA's decision-making responsibility but rather to seek advice on the desirability of each of a slate of alternatives. Typically the LVA would present the alternatives in the form of:

- programs to be terminated.
- programs to be maintained.
- programs to be improved.
- programs to be added.
- services/activities to be provided.

Figure 19

Overview Form to Aid in Prioritization of Alternatives

	Overall Weighted Rank of Client Demand/Interest (from Fig. 14)	Labor Market Overall Undersupply Rank (from Fig. 16)	Rank of Need for Attention to Program Based on Evaluations (inverse of Column 5) (from Fig. 17)	Other . . .	Ease of Implementation (from Step 1c)	Availability of Resources (from Step 1c)	Relationship to Institutional Philosophy and Goals	
Existing Programs								Tentative Action
1.								_____
2.								_____
3.								_____
.								_____
.								_____
Programs Not Currently Offered								
1.								_____
2.								_____
3.								_____
.								_____
.								_____
Categories of Vocational Activity/Service	Overall Need for Attention* (from Fig. 18)	Relationships to Existing Programs	Relationships to Ongoing Improving	Relationships to Programs Not Currently Offered	Relationships to Special Population Needs			
Curriculum & Instruction								_____
Administration								_____
Facilities & Equipment								_____
Student Organizations								_____
Public Relations								_____
Placement & Follow-up								_____
Ancillary Services								_____
Advisory Committees								_____
Student Recruitment & Selection								_____
Guidance & Counseling								_____
Philosophy & Goals								_____

*from Column 6

Step 3

Then trade-offs need to be considered, such as:

- should any of the "programs to be maintained" be terminated to generate the funds necessary to improve existing or to implement new programs?
- should any of the "programs to be improved" be terminated to generate the funds necessary to maintain existing or to implement new programs?

LVA's will note that in most cases the primary decisions center on "which programs and services are most important." These decisions are necessarily tempered by considerations such as the following:

- The existence of tenured faculty
- The availability of qualified instructors
- The existence of laboratories and equipment
- The willingness of the local board of education to match and/or accept costs
- The availability of external (state and federal) funding
- The percentage of the available budget allocated to maintain existing programs
- The need to address state and national priorities

Step 4

Developing a Program of Work

Once the LVA has achieved overall consolidation of priorities based on the best available data, opinion and group process, then a systematic program of work needs to be developed. Figure 20 provides a worksheet for this activity. Simply stated, this program of work allows the LVA to:

1. Define each priority in terms of one or more objectives that detail what is to be accomplished.
2. Spell out indicators of success for each objective. These state the evidence that will be accepted as indication of achievement of the objective.
3. Itemize the tasks necessary to accomplish each objective in chronological order and specify deadlines for their accomplishment are established.
4. Assign specific personnel to each task and alert them to the deadlines.
5. Monitor progress and conduct periodic follow-up as to goal achievement for redirection/reassignment where necessary.

Summary

Determining institutional priorities and systematic planning requires the examination of all data sources to establish the feasibility of each possible program offering. Reconciliation of

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Program of Work Objective Action Sheet

Goal # _____

Objective # _____

Directions: Complete this form for each objective of each goal, which is to be obtained during this next fiscal year. Please provide information regarding cost implications (if any) of each task and explanatory remarks as necessary in the Comments column.

SPECIFIC TASKS	RESPONSIBILITY	DEADLINE	COMMENTS	COST IMPLICATIONS	
				Element	Amount

potential programs must be made in light of the factors considered most important by the community and available resources. Most LVAs will find it useful to cycle through the process several times in order to gain more closure. This iteration also guards against the premature formation of decisions.

As outlined, the four-step process will result in systematic treatment of the large amount of information available to the LVA. Furthermore, the comprehensive approach described will result in documentation that places the LVA in an increasingly more competitive position for resources that will apparently be in shorter supply.

Planning for Legislative Compliance

Introduction

Federal legislation and regulation often forms a framework that guides local action. At other times these rules become quite directive . . . at least to those using federal dollars. This guide has attempted to infuse compliance requirements and guidelines throughout its recommendations, however, it is also useful to draw specific attention to these stipulations. In this way the LVA can:

- after formulating his/her initial plan for vocational education, review it for specific conformance with established guidelines.
- conveniently consult with specific special-interest/needs groups to confirm that their needs would actually be addressed by the proposed plans.
- compile specific information in the special formats often required to demonstrate compliance with various mandates.

Accountability and Compliance Mandates

Frequently, state and federal funds represent a significant proportion of an LEA's vocational education funds. In order to be initially eligible and then to maintain that eligibility, the institution receiving federal vocational funds must:

- submit an annual local plan and application.
- establish and use a local advisory council for vocational education.
- coordinate vocational education programs with employment training programs conducted by prime sponsors under the Comprehensive Employment and Training Act of 1973 (CETA).
- conduct job placement and follow-up activities.
- consult with representatives of other private and public educational and training resources available in the area.
- provide for participation of students from nonprofit private schools in any exemplary or innovative projects.

The state of Missouri also has certain requirements which the LEA must meet in order to seek vocational reimbursement. These include:

- facility requirements (described in the Handbook for Vocational Education).
- program enrollment standards (minimum and maximum class size described in the Handbook for Vocational Education).
- instructional standards (minimum number and length of class periods described in the Handbook for Vocational Education).

- teacher certification requirements (as outlined in the five-year State Plan for Vocational Education).
- administrative reports (enrollment, follow-up, etc. as requested by C & AE).

There is, built into these legal requirements, nevertheless a great deal of flexibility in how an LVA can address these mandates. Since the intent of these rules is to ensure that federal and state vocational dollars are used for their intended purpose, namely the provision of training, and related services, for those seeking employment in occupations requiring less than a baccalaureate degree.

To assist the LVA in addressing these mandates, the following section of this guide will highlight the two areas of major concern:

- Vocational education and services for special populations
- Vocational advisory councils

Special Populations

Because vocational education is intended to prepare all interested persons for the world of work, vocational training and support services must be appropriately available and equitably provided to special populations. These include:

- handicapped persons such as those who are:
 - mentally retarded
 - hearing disabled
 - speech impaired
 - learning disabled
 - visually impaired
 - emotionally disturbed
 - physically impaired
- disadvantaged persons, either:
 - economically
 - socially
- limited English-speaking persons.
- members of ethnic/racial minorities.
- displaced homemakers.
- single heads of households who lack adequate job skills.
- persons who seek employment in jobs not traditionally held by members of their sex.
- inmates of correctional institutions.

Essential Planning Information

In planning for vocational education, two basic factors are involved: identifying labor market demand and serving student

needs. When planning for special populations, new dimensions are added to the process. The LVA needs to ascertain:

- the presence of special populations in the community served and whether their incidence in vocational education is commensurate.
- whether modifications to equipment and facilities are required to properly serve special populations.
- if additional kinds and/or increased amounts of support services are necessary.
- the appropriateness of existing vocational program entrance requirements in the light of the characteristics of each category of special populations.
- the possibility of barriers being imposed by scheduling practices.

LVAs need to review indicators such as those listed to gain insight into the actual extent to which their programs are serving the needs of special populations. The presence of any or all of these indications suggests the existence of unaddressed special population needs:

- Vocational enrollments in any given program or course that are 75-80% of a single sex
- Programs/courses that have disproportionate enrollment, to that of the host community, by a specific racial or ethnic group
- Limited numbers of special population completers, as compared to entrants
- High unemployment rates among special population vocational program completers

Strategies to Address Special Population Needs

The LVA must, in a positive spirit of meeting the existing needs, establish a systematic approach to this end. Some of the features of such an approach would include:

- completing the Missouri Civil Rights Compliance Review Guide for Vocational Education.
- conducting a needs assessment that ascertains the vocational needs and priorities of each category of the special population clientele.
- surveying school/institution enrollees as well as the community to establish the incidence of each category of special populations.

- establishing communications with community/state agencies serving special populations.
- appointing special population role models to program advisory committees.
- establishing communications with special population community leaders.
- providing special population relevant in-service training for personnel and staff.
- hiring members of special populations to fill staff/faculty vacancies.
- conducting detailed evaluations, specific to each category of special population, to identify existing barriers that work against the participation and/or success of special populations. These barriers might include:
 - geographic location of vocational education sites
 - teacher/counselor attitudes toward special populations
 - architectural restrictions
 - financial requirements
 - academic/basic skill deficiencies
 - a lack of information as to available vocational education opportunities
 - peer pressure within special population groups, to restrict pursuit of certain training opportunities
- consolidating local and presently existing data to back-stop survey data relating to the incidence of special population categories, e.g., the numbers of students receiving assistance with school lunches, the percentage of community families receiving ADC, teacher reports of learning difficulties, school discipline records, and the like.

The development of a systematic plan for the vocational education of special populations also involves the establishment of priorities in consultation with special education experts, rehabilitation counselors, equity specialists and vocational faculty. Because national priorities have focused action on these needs, several useful sources and guides are available to help in the development of a local plan. These include:

- The Administrator's Resource Guide in Providing Services for the Handicapped
- Fostering Sex Fairness in Vocational Education: Strategies for Administrators
- Resurge '79
- Vocational Counseling for Displaced Homemakers--A Manual
- Nontraditional Recruitment Model for Missouri

- Resource Guide for Vocational Educators and Planners Helping Displaced Homemakers Move from Housework to Paid Work Through Vocational Training
- Untapped Resources in Vocational Education--A Trainer/Teacher Guide

Advisory Committees

For programs and/or institutions receiving federal vocational funds, local advisory committees are a requirement. LVAs however, have found that regardless of funding, advisory committees can serve many useful purposes. These include:

- assisting in annual and long-range program planning.
- advising LVA on current job needs and the relevancy of existing vocational programs to meet these needs.
- providing a communication linkage between school, community and business/industry and labor.
- assisting with evaluation of the instructional program.
- assisting in the conduct of the surveys to identify program needs.

Institutions may appoint either program specific advisory committees and/or overall ones. Committee size is not specified by law but regulations to insure representative membership as well as good practice specify participation of:

- both sexes.
- appropriate racial and ethnic minorities as found in the communities served.
- business, industry, and labor representatives.

LVAs have found that good planning involves significant advisory committee input. Recommendations for advisory committee procedures are found in the booklet, Handbook for Advisory Council Members. Generally, it is desirable that:

- the LVA attend advisory committee meetings.
- the LVA provides appropriate resources to support advisory committee activities, e.g., secretarial, travel, etc.
- advisory committees meet on a scheduled basis and record their deliberations in minute form.
- advisory committees present an annual report outlining their recommendations and evaluations.
- LVAs prepare an annual brief indicating actions taken on the basis of previous advisory committee reports.
- advisory committee members receive appropriate recognition for their services.

Summary

Federal mandates and dedication to good practice require the LVA to address the needs of special populations. Evidence of a national concern to address special population needs is manifested by the federal set-aside incentives. The LVA needs to be aware of these special concerns and implement planning strategies to resolve these issues in his/her institution and individual programs.

Establishing Working Relationships

The responsibility for building a strong vocational education constituency is the administrator's. One of the important essentials in building a good working relationship with the public is understanding the community. The administrator must know the community economic and cultural values, and the power structure. Community power structures operate in an informal setting and the influential people may not be easy to identify. One recommended procedure is to consult the PACE (Polling Attitudes of Community on Education) Manual that is available from Phi Delta Kappa's Center for Dissemination of Innovative Programs (see Finding Additional Information).

The purpose of this chapter of the guide is to identify some of the organizations the LVA must interact with for the benefit of the institution to help in achieving its goals. Administrators need special skills to identify people who can assist in building a strong public image of the vocational education program.

Parent Teacher Organizations and Community Groups

The PTO and other civic organizations are made up of community members. These organizations have regular meetings and provide an excellent form for the school to inform the citizenship of what it is doing. The LVA should take the initiative by acquainting him/herself with the leaders and program chairpersons of these organizations and offer to provide speakers for their meeting. Teachers should be encouraged to promote their programs in this manner. Ideas for talks of this nature are infinite. The following are a few suggestions:

- New Programs
- Special Funded Projects
- New Instructional Methods
- Student Organization Activities
- Student Organization Contest Winners
- New Teachers
- Success of Graduates
- Overview of Program Offerings
- Special Interest or Hobbies of Staff Member
- New Equipment
- Student Projects

An information system between the school and parents needs to be developed. Parents need to be invited to become actively involved in school affairs. Strategies for nurturing good relationships with parents include:

- Avoiding the trap of only communicating bad news to parents
- Sending periodic school newsletters
- Parents' day

- Open house
- Solicit parent opinions (see needs assessment section in Securing Planning Information)
- Invite parents to recognition assemblies

Another aspect of parent involvement and establishing good communications is with special populations student enrollment. Family support and encouragement in these students is essential. When members of these groups enroll in a program the LVA should make sure the parents are aware and supportive of their child's interest.

Participating (Sending) Districts

The LVA should develop a strong communication linkage between his/her operation and the administrators and instructional staff of the sending schools. The following represent some suggested ideas for establishing better communication with sending schools:

- Encourage counselors to work closely with sending school counselors.
- Vocational teachers should communicate frequently with teachers of related subjects in sending schools.
- Invite sending school staff/board members to tour the vocational facilities.
- Invite sending school board to hold occasional board meeting in the vocational facilities.

Relationships with Local Board Members

This group of individuals is elected by the community or appointed by sending schools to make relevant decisions regarding school/institution policy and programs. The LVA should prepare written reports to the board on all institutional activities and make recommendations through proper channels on all related matters.

To establish a good working relationship with board members the LVA should know the board members backgrounds and values as best he/she can. When something happens at the school that might be of concern to the board members, the LVA might want to communicate with board members to alert them to the situation ahead of time. The key things the LVA will want to remember in working with the board are to:

- Prepare written reports with quality documentation for all recommendations and submit well in advance of the scheduled discussion
- Recognize that any problem will have several solutions
- Do not expect all board members to accept the recommended solutions
- Do not polarize disagreements
- Accept responsibility and readily admit errors or mistakes

Department of Elementary and Secondary Education

State and federal mandates require the LEA to submit a variety of data annually. The Department of Elementary and Secondary Education (DESE), School Data Section, publishes an annual Data Acquisition Calendar which lists the date due, form number, form title, authority requiring report, and to whom the form should be submitted. The Calendar is available upon request from the DESE Management Information Services section.

Prior planning will result in improved quality of the data submitted. This should in turn result in the improvement in the quality of decisions made based on that data.

Vocational Rehabilitation. The LVA should refer potential clients to this agency, a service division of DESE, for special assistance. The institution should also inform the agency if they have qualified teachers and special equipment and facilities available to meet the clients' needs.

Department of Higher Education

LVAs operating postsecondary and/or community junior college programs which qualify as reimbursable vocational offerings, will need to familiarize themselves with the related staff members of the Department of Higher Education. A copy of each of the following two documents should be secured and reviewed in order to coordinate planning activities with this agency.

- Master Plan III for Postsecondary Education in Missouri
- Program Review Policies and Procedures

Universities/Colleges

Some universities and colleges within the state offer two-year vocational programs and are under the jurisdiction of the planning regulation previously mentioned. The program offerings and location may be identified with the Directory of Vocational Programs (see Finding Additional Information).

The LVA (particularly at the community junior college) will want to become familiar with related programs at four-year colleges and universities with which articulated program agreements might be worked out. Good communications with the four-year colleges and universities will permit the LVA to utilize many of the resources these institutions have available to assist in planning. Some examples of such resources that may be used to the mutual benefit of the parties involved include:

- Class projects (LVA might contract with a class to assist in a needs assessment project)
- Internship agreements (contract to provide an internship for a graduate student to assist in planning)
- Provision of curriculum materials and guides used for program planning (university/college may be able to provide or develop new materials for programs)

- Provide in-service training (university/college professors can provide in-service workshops for staff)

Accreditation

The LVA needs to be aware of the institutional and possible program specific accreditation agencies that play a constructive role in maintaining quality. The time lines involved and the actual processes employed are also pertinent information. For most vocational schools/institutions in Missouri the primary institutional accrediting agency is the North Central Association of Schools and Colleges. Private schools tend to be accredited by National Association of Trade and Technical Schools (NATTS).

Although the number of occupational programs requiring special accreditation is small, the LVA should obtain information concerning these programs early in the planning stage. The LVA should also establish communications with that agency, and a local expert credentialed in that occupation to assist in program planning (names of such individuals may be obtained through professional associations).

Figure 21 lists a sampling of occupational programs and the respective accrediting agency. The service area supervisors in the Career and Adult Education Division of DESE can provide you with information of the special accrediting agencies in their respective areas.

Business/Industry Labor Relationships

Vocational Education must establish strong ties to the business/industry and labor (BIL) leaders in the community/region. A very useful resource in this regard is the AVA's Public Relations Guide. The National Association for Industry-Education Cooperation (see Finding Additional Information) has a number of publications available to assist LVA's in establishing contacts with BIL leaders. One approach to soliciting support from BIL is by inviting these people to the school for a luncheon or dinner, followed by a tour of the facilities of programs in which the individual may have a strong interest. This allows you to discuss ideas for new programs and gain more support for existing ones. The outcome of these promotional activities for the school are:

- A stronger community support base
- Individuals/firms may donate equipment and/or vehicles
- Individuals/firms may provide scholarships and/or awards
- Individuals/firms may hire more graduates
- Individuals may want to serve on an advisory committee

Figure 21

Sample Occupational Programs and Accrediting Agencies

Program	Accrediting Agency
Aviation Technology	Federal Aviation Administration
Dental Laboratory Technology	American Dental Association
Nursing	Missouri State Board of Nursing National League of Nursing
Real Estate	Missouri Real Estate Commission

Note:

In addition to accredited programs, in Missouri there are also licensed and regulated occupations. For details as to the implication of such regulations for implementation and program operation, contact the appropriate service area supervisor in Career and Adult Education.

Commerce and Industrial Development Agency

The Commerce and Industrial Development Agency (CID) was established to assist new and existing industries in Missouri. Figure 22 depicts the relationship between industry, the Department of Elementary and Secondary Education (DESE), Division of Career and Adult Education (C&AE), the local vocational institution, and CID.

When a new or existing industry requests assistance in establishing a training program to meet their labor needs, CID would contact the Director of Industrial Education within C&AE. The Director of Industrial Education would in turn work through a local vocational institution in the area to establish or expand a vocational program to meet this need.

It is also possible that the industry may contact a local vocational school first. In this case the LVA of that institution would contact the Director of Industrial Education in C&AE for assistance in planning to meet this need. The following represents some of the types of agreements which can be established between the local school and industry:

- Training on industrial site with vocational teacher
- Training industrial trainer(s) on site
- Training industrial personnel in vocational school
- Establishing cooperative training program
- Recruiting graduates from programs through state
- Serving as educational broker

Funding to meet this type of special situation is available on a project basis through DESE.

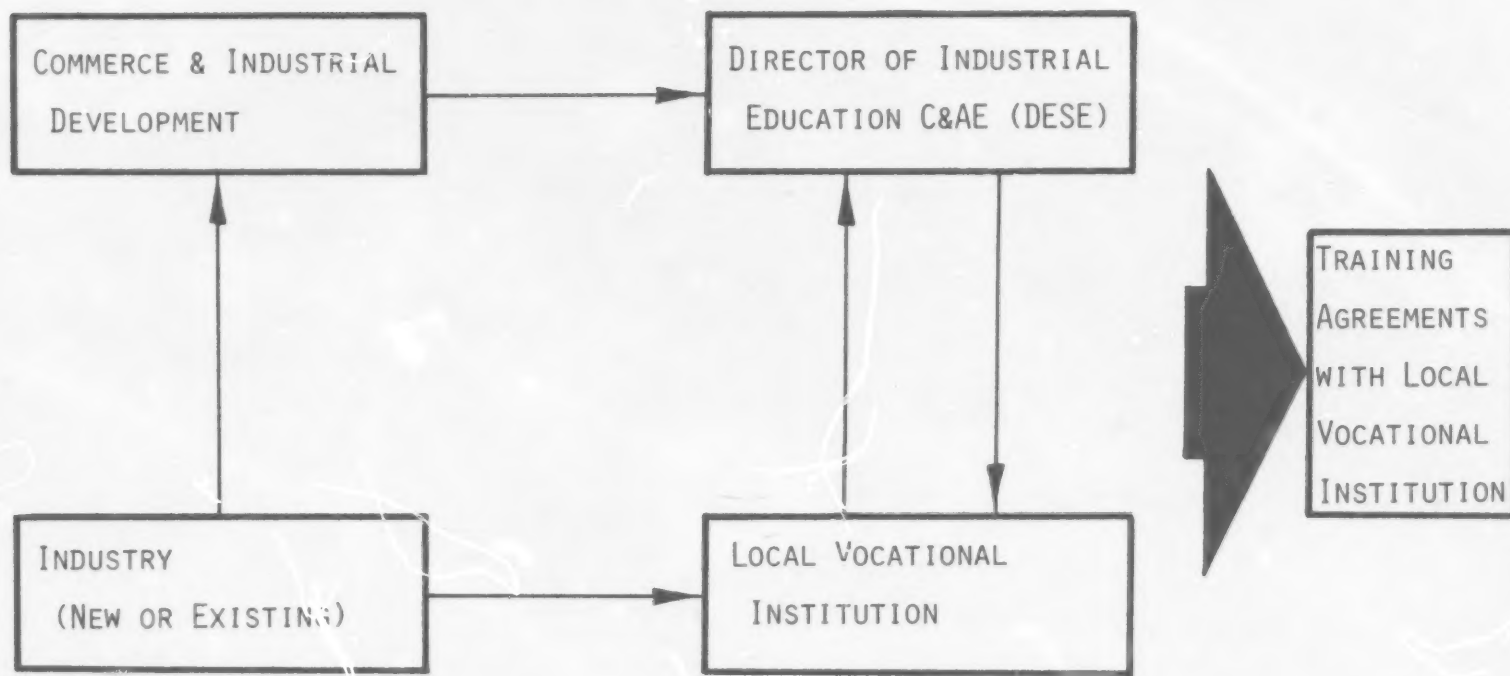
Professional/Trade Associations

The LVA should encourage and support faculty and staff membership and participation in their professional/trade associations. The following represents a sampling of the number of benefits these organizations provide to vocational programs.

- Student financial assistance
- Student awards
- Equipment (donation/special purchase)
- Source of Advisory Committee member(s)
- Journal Publications
- Directories of Training Programs
- Job Placement Service

FIGURE 22

RELATIONSHIP OF COMMERCE & INDUSTRIAL DEVELOPMENT TO VOCATIONAL EDUCATION



Missouri Division of Employment Security

As previously mentioned in the Securing Planning Information chapter of the guide, Missouri Division of Employment Security (Job Service Office) is an invaluable source of employment demand information. The LVA should establish communications with the manager of the regional/district office for assistance in planning. The LVA may want to invite the Employment Security manager to key planning meetings as a resource expert when considering changes in program offerings. The institution should encourage graduating students to utilize the services of this agency in securing employment.

Comprehensive Employment and Training Agencies

The LVA should obtain a copy of currently applicable CETA laws to see what is available for CETA-Vocational Education linkages that would benefit the local institution. The LVA should develop a communication bridge between him/herself and the CETA Prime Sponsor and/or local CETA delivery agent to better utilize existing equipment and facilities and provide additional resources for the institution. Contact the U. S. Department of Labor regional office, Employment and Training Administration (see Finding Additional Information) to obtain the name of the Prime Sponsor and/or local CETA delivery agency.

Summary

The establishment of a good working relationship with education, business and industry, and other relevant groups is extremely valuable and essential in the planning process. Cooperative arrangements with these organizations will provide many direct benefits to the institution, and serve as a public relations tool as well.

Finding Additional Information and Help

The purpose of this chapter is to provide the LVA with detailed information on all of the suggested resources addressed in this guide. These resources are divided into two classes, agencies and documents.

The resource agency list contains three columns: the agency name and address, key contact person, and telephone number. In some cases the key contact person column is left blank to be filled in by the LVA after corresponding with that agency for a particular service. The resource document list provides the LVA with a complete bibliography of all documents found in the guide to assist the LVA in obtaining a copy of specific document(s) for his/her institution.

Resource Agencies

<u>Agency</u>	<u>Contact Person</u>	<u>Telephone</u>
American Association of Community & Junior Colleges One Dupont Circle, NW, Suite 410 Washington, DC 20036	_____	202/293-7050
American Vocational Association 2020 North 14th Street Arlington, VA 22201	_____	703/522-6121
Commerce & Industrial Development 1014 Madison Jefferson City, MO 65102	_____	314/751-3674
*Department of Elementary & Secondary Education		314/751-4212
• Division of Administration Management Information Services	John Allan	314/751-3501
School Data Section	Bertha McClaskey	314/751-2569
• Division of Career & Adult	_____	314/751-3500
• Division of Special Education	Roland Werner	314/751-3502
Employment & Training Adminis- tration Office of CETA 911 Walnut Kansas City, MO 64106	Hermann Wallace	816/374-3836
Instructional Materials Laboratory 10 Industrial Education Building University of Missouri-Columbia Columbia, MO 65211	Eileen Woody	314/882-2883

*For a complete listing of DESE numbers see Missouri School Directory
(for a copy, contact School Data Section)

<u>Agency</u>	<u>Contact Person</u>	<u>Telephone</u>
Media Center State Fair Community College 1900 Clarendon Road Sedalia, MO 65301	<u>Shirley Evans</u>	816/826-7100
Missouri Advisory Council on Vocational Education 630 West Main, Box 545 Jefferson City, MO 65101	<u>Gordon Kutscher</u>	314/751-4384
Missouri Association of Community and Junior Colleges 402 S. Fifth Street Box 715 Columbia, MO 65205	<u>Marilyn Lake</u>	314/449-8624
Missouri Department of Higher Education 600 Clark Avenue Jefferson City, MO 65101	_____	314/751-2361
Missouri Division of Employment Security Research & Analysis Section 421 East Dunklin, Box 59 Jefferson City, MO 65104	_____	314/751-3215
Missouri Occupational Informa- tion Coordinating Committee 830d East High Street Jefferson City, MO 65101	<u>Kay Raithel</u>	314/751-2624
Missouri State Agency for Surplus Property Office of Administration P.O. Drawer 1310 Jefferson City, MO 65101	_____	314/751-3415
Missouri State Library 308 East High Street Jefferson City, MO 65101	<u>Judith Wolfe</u>	314/751-2768
Missouri Vocational Association 7031 East Battlefield Suite 114B Springfield, MO 65807	<u>Duane Yarnell</u>	417/881-0901
National Association for Exchange of Industrial Resources 540 Frontage Road Northfield, IL 60093	_____	312/446-9111

<u>Agency</u>	<u>Contact Person</u>	<u>Telephone</u>
National Association for Industry-Education Cooperation 235 Hendrick Boulevard Buffalo, NY 14226	<u>Donald M. Clark</u>	716/833-6346
National Center for Education Statistics 400 Maryland Avenue, SW Washington, DC 20202	_____	301/436-7900
National Center for Research in Vocational-Technical Education The Ohio State University 1960 Kenny Road Columbus, OH 43210	_____	800/848-4815
National Occupational Informa- tion Coordination Committee 2100 M Street NW, Suite 714 Washington, DC 20037	_____	202/653-7680
On Line Search Service Ellis Library University of Missouri-Columbia Columbia, MO 65211	_____	314/882-7415
Public Affairs Information Service University of Missouri-Columbia 10 Professional Building Columbia, MO 65211	<u>Ed Robb</u>	314/882-4805
Superintendent of Documents United States Government Printing Office Washington, DC 20402	_____	
Tools for Schools Loan Program Defense Industrial Plant Equip- ment Center Attention: DIPEC-SSA Airway Boulevard Memphis, TN 38114	<u>Mr. Bon-Almen</u>	901/744-5641
U.S. Department of Commerce Bureau of the Census Regional Office 1 Gateway Center, Suite 500 Kansas City, KS 66101	_____	816/374-4601

<u>Agency</u>	<u>Contact Person</u>	<u>Telephone</u>
U.S. Department of Education Office of Adult & Vocational Education Room 5102 Regional Office Building #3 7th & D Streets SW Washington, DC 20202	_____	202/245-8166
U.S. Department of Labor Bureau of Labor Statistics Regional Office 911 Walnut Street Kansas City, MO 64106	_____	816/374-2481
V-TECS 795 Peachtree Street, N.E. Atlanta, GA 30308	_____	404/875-8011

*Resource Documents

Annual Register of Grant Support. Chicago: Marquis Academic Media, Marquis Who's Who, Inc., 1980.

Directory Vocational Programs in Missouri Area Vocational Schools, Junior Colleges, Colleges, and Universities. Jefferson City, MO: Missouri Department of Elementary and Secondary Education, 1980

Drewes, Donald W., Katz, Douglas S., Spetz, Sally H., and Thomas-Gordon, Sandra L. Vocational E.S.P. Planning System. Raleigh, NC: Conserva, Inc., 1980.

Elias, John E., and Behymer, Jo. Handbook for Advisory Council Members. Columbia, MO: Department of Practical Arts and Vocational-Technical Education, University of Missouri-Columbia, undated.

Elias, John E., Dyrenfurth, Michael J., Dean, E. Dale, and Dunlap, William S. Vocational Program Evaluation Project--Administrators Handbook. Columbia, MO: Department of Practical Arts and Vocational-Technical Education, University of Missouri-Columbia, 1980.

Fiscal Year 1981-83, State Plan for Part B of the Education of the Handicapped Act as Amended by PL 94-192. Jefferson City, MO: Department of Elementary and Secondary Education., 1980.

Fostering Sex Fairness in Vocational Education: Strategies for Administrators. Columbus, OH: The Center for Vocational Education, The Ohio State University, 1979.

The Foundation Directory. New York: The Foundation Center, 1980.

Good, James D., and DeVore, Mary A. Nontraditional Recruitment Model for Missouri. Columbia, MO: Instructional Materials Laboratory, University of Missouri-Columbia, 1981.

Gross, Richard E. "Seven New Cardinal Principles." Kappan, December, 1978, pp. 291-293.

Handbook for Vocational Education. Jefferson City, MO: Department of Elementary and Secondary Education, 1981.

Master Plan III for Postsecondary Education in Missouri. Jefferson City, MO: Missouri Coordinating Board for Higher Education, 1979.

Missouri Career Education State Plan. Jefferson City, MO: Department of Elementary and Secondary Education, 1980.

Missouri Civil Rights Compliance Review Guide for Vocational Education. Jefferson City, MO: Department of Elementary and Secondary Education, 1980.

*Only resources cited in this Guide are listed in this section. Additional planning documents identified in the literature search for developing this Guide are found in Local Vocational Administrators Planning Guide: Final Report. (for a copy, contact RCU, C & AE, DESE).

- Missouri Comprehensive Needs Assessment Survey. Columbia, MO: Missouri Testing and Evaluation Service, University of Missouri-Columbia, 1981.
- Missouri School Directory, annually. Jefferson City, MO: Department of Elementary and Secondary Education, 1981.
- Missouri State Plan for Vocational Education, 1978-82. Jefferson City, MO: Department of Elementary and Secondary Education, 1977.
- Missouri State Plan for Vocational Education, annually. Jefferson City, MO: Department of Elementary and Secondary Education, 1980.
- MOICC Occupational Data Handbook. Jefferson City, MO: Missouri Occupational Information Coordinating Committee, 1981.
- National Center for Education Statistics, Publications 1980. Washington, DC: U. S. Department of Education.
- Norton, Robert E., Ross, Kristy L., Garcia, Gonzalo, and Hobart, Barry. Develop Local Plans for Vocational Education, Parts I and II. Columbus, OH: The Center for Vocational Education, The Ohio State University, 1977.
- PACE (Polling Attitudes of Community on Education) Manual. Bloomington, IN: Center for Dissemination of Innovative Programs, Phi Delta Kappa, 1981.
- Patrick, Peggy W. Planning Vocational Education: A Guide for Local Administrators. Little Rock, AR: Arkansas Department of Education, Vocational-Technical and Adult Education, 1977.
- Program Review Policies and Procedures. Jefferson City, MO: Missouri Department of Higher Education.
- Promoting Vocational Education: A Public Relations Handbook for Vocational Educators. Arlington, VA: American Vocational Association, undated.
- Public Law 94-482. 94th Congress, October 12, 1976.
- Regan, Madelyn K. and McBride, Kirsten. Administrators Resource Guide: Providing Services for the Handicapped. Des Moines, IA: Midwest Regional Resource Center at Drake University and the Missouri Department of Elementary and Secondary Education, 1980.
- Resource Guide for Educational Programs and Services. Jefferson City, MO: Department of Elementary and Secondary Education, undated.
- Resource Guide for Vocational Educators and Planners Helping Displaced Homemakers Move From Housework to Paid Work Through Vocational Training. Newton, MA: Education Development Center, 55 Chapel Street, 1980.

Resurge '79. U. S. Department of Education, September 1979, Bureau of Occupational and Adult Education, Division of Technical Education. Manual for Identifying, Classifying, and Serving the Disadvantaged and Handicapped Under the Vocational Education Amendments of 1976 (PL 94-482).

Stevens, David W., and Taylor, Stephanie. Occupational Employment Data Sources for the State of Missouri and Substate Areas. Columbia, MO: University of Missouri-Columbia and the Missouri Division of Manpower Planning, 1980.

U. S. Census Report Series PC(1)B and PC(1)C. U. S. Bureau of Census, 1980.

U. S. Department of Commerce. Population Census Reports 1980. Washington, DC: U. S. Department of Commerce, Bureau of Census, 1981.

Untapped Resources in Vocational Education: A Trainer/Teacher Guide. (Sex Equity Guide). Columbia, MO: Instructional Materials Laboratory, University of Missouri-Columbia, 1979.

Vocational Counseling for Displaced Homemakers--A Manual. Newton, MA: Education Development Center, 55 Chapel Street, 1980.